PhD Dissertation

”Made in Denmark” Ecological perspectives on applied sport psychology and talent development in Danish professional football

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Foreword and acknowledgements

My undergraduate studies at the Institute of Sports Science and Biomechanics, University of Southern Denmark started at a rather late age, compared to many of my peers. Before I started studying, I was fascinated by how psychology affects the ability to perform. Over the years, this curiosity grew and resulted in a bachelor degree involving a project that I wrote with one of my close friends. The project entailed consulting four second-division football players. These initial experiences shaped my future interest and uncovered a link between the theory and practice of sport psychology. More specifically, I had a vague idea of the huge difference between reading about sport psychology and actually doing it – it takes skills to work in real life, not something that you can glean by reading books. I have always played football and at this stage in my studies I was able to connect my professional and personal interests. These experiences led to my Master's thesis, which involved four footballers from FC Copenhagen, and these experiences in turn formed the foundation for this dissertation. Since I began my applied work in sport psychology, one of my motivations has been to create stronger bonds between the theory and practice of sport psychology, especially in football. Fortunately, it was possible to realize this aim at Aarhus Gymnastikforening (AGF) football club.

I wish to express my deep gratitude to AGF football club and the participants who took part in the interviews, observations and informal talks. In particular to Henrik Skov and Ole Keldorf - I wish to thank both of you for our conversations on, and your dedication to, talent development in football. I also appreciate our continuing work together. I also wish to thank the Ministry of Culture - Committee on Sports Research and Team Denmark who allocated grants, thereby making the dissertation possible. Special thanks go to my supervisors, Mette Krogh Christensen and Dorothee Alfermann, for their patience, advice, support and time over the years. The most important thing is to practice the holistic approach that one preaches in research. I would also like to express my thanks for the many constructive comments that I have received during my participation in the research group "Talent and excellence in sport", especially from Louise Storm and Kristoffer

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List of papers linked to this dissertation

Paper 1 **Psychosocial skills in a youth soccer academy: A holistic ecological perspective**

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2013 **Elite athletes' transitory and existential relationships: The role of key persons in athletes' pathways to the elite.**

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2013 **The art of goal setting: A tale of doing sport psychology in professional football**

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2012 **Sport psychology interventions for young athletes: The Perspective of the Sport Psychology Practitioner**

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2012 **Looking at success from its opposite pole: The case of a less successful talent development golf environment in Denmark**

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2012 **Eliteidrætsmiljøer med udgangspunkt i badminton** (Elite sport environments – a case from the Danish Badminton Association)
Larsen, C. H. & Kaysen, L. R. Research Report for Team Denmark - Danish Institute for Elite Sports (Research Report).

2012 **Successful talent development in soccer: The characteristics of the environment**
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2011 **The pathway to professional soccer - the role of life skills in a successful soccer environment**
Larsen, C. H.; Christensen, M. K. & Alfermann, D. *The 13th European Congress of Sport Psychology, Funchal, Portugal* (Oral presentation).

2011 **From prospect to Olympic athlete - The Role of Life-skills in the talent development process**
Larsen, C. H. *The 13th European Congress of Sport Psychology, Funchal, Portugal* (Oral presentation).

2011 **Talentudviklingssamtaler: Udvikling af mentale færdigheder i sport** (Consulting young athletes: Developing psychosocial skills in sport).
Larsen, C. H. Odense: University Press of Southern Denmark (Book in Danish).

2010 **A Comparative Analysis of the Concept of "Life Skills" in Denmark, USA and UK**

Larsen, C. H. & Christensen, M. K.

European College of Sport Science, Antalya, Turkey" (Poster).

2010 **The role of life skills in a successful soccer environment**

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English summary of dissertation

The holistic ecological approach to research in talent development in sport highlights the central role of the overall environment as it affects an athlete in his/her athletic development. In the talent development process in elite sport, applied sport psychology becomes an important factor as a way to optimize the performance of a team or an athlete. This dissertation aims to throws light on the constraints and preconditions involved in applying sport psychology from an ecological perspective in a successful Danish football academy. The dissertation is based on a case study and data collection includes interviews and participant observations of daily life in the environment, supplemented with analysis of documents from the football academy. The dissertation presents an ecological sport psychology service model and describes six fundamental governing principles to inform an intervention inspired by the holistic ecological perspective. The findings reveal that practitioners need to be aware of preconditions and constraints before developing strategies and interventions in professional football. These preconditions and constraints are relevant for, and inform, sport psychology services in professional football. The dissertation has the potential to inspire practitioners to be sensitive to, and analyze, not only the individual player's athletic development but also the overall organizational settings and culture in sport psychology delivery in talent development environments.

Dansk resume af afhandling

Den holistisk økologiske tilgang til forskning indenfor talentudvikling lægger vægt på miljøets overordnede betydning for atletens udvikling. I talentudviklingsprocessen i elitesport spiller sportspsykologi en stor rolle i at optimere den enkelte atlet og holdet. Denne afhandling har til formål at udfolde begrænsninger og forudsætninger for at anvende sportspsykologi fra et økologisk perspektiv i et succesfuldt dansk fodboldakademi. Afhandlingen er et case studie og dataindsamling består af interviews og deltagerobservationer af det daglige liv i miljøet suppleret med analyse af dokumenter fra fodboldakademiet. Afhandlingen præsenterer en anvendt sportspsykologisk model og beskriver seks fundamentale principper, der skaber grundlag for interventioner inspireret af et holistisk økologisk perspektiv. Resultaterne viser, at sportspsykologiske konsulenter og andre praktikere skal være bevidste omkring de forudsætninger og begrænsninger, der eksisterer i professional fodbold før interventionen påbegyndes. Disse forudsætninger og begrænsninger er afgørende for det psykologiske arbejde, der bliver gennemført i professionelle fodboldklubber. Afhandlingen rummer potentialet til at inspirere sportspsykologiske konsulenter og andre praktikere til at være sensitive i forhold til og analysere ikke kun den individuelle spiller, men hele organisationen og kulturen, når han eller hun arbejder med sportspsykologi i talentudviklingsmiljøer.

CONTENTS

List of figures

Chapter 3

Chapter 4

Chapter 6

PROLOGUE

"Football is love and passion – like that for a woman", Gianluca Vialli states in his book *The Italian Job – A journey to the heart of two great footballing cultures* (Vialli & Marcotti, 2006). Vialli is one of the most famous Italian footballers and has won league titles with Sampdoria and Juventus, 59 caps for Italy and the 1990 World Cup (WC). His experiences in the two great footballing cultures, England and Italy are the starting point of his book. Vialli's experiences of working within two different cultures and the impact of culture on football are of particular interest in this dissertation. He describes the differences between the cultures as his love for two very different women, Mary and Veronica, respectively representing the football cultures of England and Italy.

> Mary is faithful, bubbly, comforting. She may not be a natural beauty, but she gives everything she has and makes you feel special. Maybe she could spend a few more hours in the gym; perhaps she could dress elegantly instead of in high-street jeans and top, and perhaps a touch of makeup. She only remembers the good times and never casts up past events to use against you (p. 11).

In contrast to Mary:

> Veronica is passionate, vain and envious. She is drop-dead gorgeous and she knows it. In fact, she uses her beauty to intoxicate and manipulate. She gives you just enough to keep you coming back, but she preys on your insecurity, messing with your mind. She's obsessed with detail, impeccably made up and elegantly dressed, always glamorous and enticing. But your relationship is never easy. She ignores you and she cheats on you. When you are with her you are rarely happy, yet you always go back (p. 12).

Vialli's metaphors provide some insight into the differences that exist across football cultures in Europe. In the light of Vialli's personal experiences as a footballer, the description that he offers highlights how a nation's culture affects several aspects of the game: how football is played in each country; the behavior of spectators; how players behave, as well as the particular environment in the football club (perhaps with the exception of organizational structure, see Relvas, Littlewood, Nesti, Gilbourne, & Richardson. 2010). Implicitly, Vialli's description is important and relevant as he uses metaphors to represent cultural differences that reveal that the culture of the individual country affects the different layers that exist within football organizations: from the football association, to

club culture, to team culture and talent development that he describes in depth in his book (Vialli & Marcotti, 2006). Vialli's metaphors about culture grasp hold of important and broad "societal factors that have a powerful, yet often under-appreciated influence on talent development" (Horton, 2012, p. 43). In this sense, football is the national sport of both England and Italy. One's country of origin plays a huge role in a person's exposure to sports and the conditions and constraints for exercising sport in the specific country (e.g., the various training facilities that are available). In Canada, children learn to play ice hockey, while in Kenya it is long-distance running, in Jamaica it is track and field and in Brazil children play football. A combination of social, cultural and financial factors underpins sport in each country (Horton, 2012). In Denmark, many children play football; football pitches can be found almost everywhere and it is the national sport.

In Vialli's perspective, English football is pictured as hard and relentless in contrast to Italian football, which is pictured as elegant and technical. Based on Vialli's narrative and metaphors and in consideration of social, cultural and financial differences in football, how would we describe Danish football culture and what could we call her? Or, putting it another way, how is football "Made in Denmark"? Grasping these issues of describing aspects of Danish national culture, however, seems a momentous task and the effort required to study Danish football culture presents, in itself, a complex undertaking. Nonetheless, the starting point of this dissertation is related to culture and a shift from the individual athlete towards the broader factors of the macro and micro-environment. If we look at the second part of the title, our attention is directed towards applied sport psychology and talent development. The majority of literature and applied perspectives in Denmark (and in Europe) are based on the practitioner working with individual athletes and the use of mental skills training (MST) (Nesti, 2010; Henriksen, Hansen & Diment, 2011). In this dissertation, the term 'practitioner' is used synonymously with 'sport psychology consultant', but the former term is preferred in order to highlight the practitioner's applied work. However, the culture and structure of the specific environment or club are fundamental for handling ever-changing needs and coping with increased demands for talent development. Moreover, football

culture and the environment affect how sport psychology plays its part in the quest to find and develop the new rising stars of football.

First and foremost, this dissertation aims to uncover preconditions and constraints involved in the delivery of effective sport psychology interventions in professional football. Based on an ecological agenda, the task is to highlight the importance of culture as a key element of the sport psychology service, whether it is the "Mary", "Veronica" or the Danish version of the sport. Secondly, this dissertation describes how culture informs the practice of sport psychology and recommends that the practitioner go beyond MST to analyze weaknesses and strengths in the environment when working within professional football. In the first chapter, I will describe the social, cultural and financial factors that underpin talent development and sport psychology in professional football in Denmark.

CHAPTER 1. INTRODUCTION

On the 26th of June 1992, a true football euphoria was generated in Denmark. At Nya Ullevi stadium in Gothenburg, Sweden, the Danish national football team played Germany in the European Championship (EC) final and won 2-0. The victory added Denmark to the list of only nine countries to have won the EC. With the victory, new and higher levels of expectation for Danish football began to arise. Winning the EC was a remarkable achievement in itself, since Denmark was the EC participant with the fewest inhabitants and, today, many of our competitor countries have the about the same number of footballers that Denmark has inhabitants ("Big Count", 2013). There had been high hopes for Danish football before the win, but from this moment on, the victory elevated the country's expectations for the national team and understanding of Danish football in general. These high expectations for football (or any other sport) are in contrast to Danish culture that, in general, is characterized by ideals such as equality and welfare (Ibsen, Hansen & Storm, 2010). These ideals have also permeated the history and culture of sport in Denmark, where a movement promoting mass participation emerged early on, uniting around a sport-for-all concept. This concept is today fundamental in Danish sports culture; however, it is in contrast to elite sport (Storm, Henriksen & Christensen, 2012). As regards the concept of culture, a classical and all-encompassing definition describes culture as a set of ideas shared by members of a group: "Culture, or civilization, taken in its broad, ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, and any other capabilities and habits acquired by man as a member of society" (Tylor, 1871, p. 1). This definition contains an understanding of the human as a bearer of culture, whereas more recent definitions emphasize the human being as both bearer and creator of culture (Kayser Nielsen, 1997). Despite the sport-for-all concept and the size of the country, the national team has often participated in both the EC and World championship (WC). The Danish people have constant high expectations for the national team and elite sport in general. However, if elite sport and professional football are to meet these expectations, high quality players

are needed who can perform at national level. This puts an emphasis on effective organizations and systems from the national level down to the grassroots. This, in turn, puts an emphasis on the ability of the Danish national football association (DBU) and professional clubs to develop talented players who later will be able to play in the national team. These perspectives highlight the need for top-level talent development systems, strategies and academies that continually are able to provide the "raw" material for future stars on the national team. In terms of the current levels and efficiency of talent development in Danish football, it seems difficult to meet expectations and create the requisite body of talented players to reach these long-term goals. Alongside performance on the national team, one of the aims in Denmark is a strong focus on talent development. At national level, especially over the last ten years, the Danish national team and DBU have performed well (currently ranked no. 20 in the world, April 2013) and have targeted talent development at club level. However, at club level Denmark is not among the top six nations in European football and Danish clubs do not enjoy the financial status of other European countries (Piani & Sartini, 2005; Storm, 2012).

Financial conditions for talent development in Denmark

Despite the aim of DBU to have a strong focus on talent development, the professional clubs struggle to provide a solid financial foundation for professional football, which subsequently affects talent development in the clubs. The professional clubs are the foundation for talent development in Denmark and under-13 teams are the starting point for the path to a professional career. The financial stability of each professional club is, therefore, of great relevance for talent development in the club. However, Danish football (and Scandinavian football) is lagging behind other European clubs, due to different organizational and historical conditions (Gammelsætter, 2009). Compared to other European countries (e.g., England), the legalization of professional football and the establishment of key football associations in Scandinavia occurred very late. Today, professional football clubs in Denmark are all formally organized and on the stock exchange (Gammelsætter,

2009). In Denmark, the professionalization of football was a mixed experience from the beginning with a multitude of clubs finding themselves in economic difficulties (Gammelsætter, 2009). Nowadays, the economic foundation for talent development is not necessarily the finest compared to our competitors. The recent financial crisis and the subsequent European debt crisis have left their mark on Danish top-level football. Despite lucrative television revenues and the hope of new sponsors from the gaming industry since the liberalization of the Danish gaming market, the clubs have not yet managed to cut costs (Storm, 2012). At time of writing, one of the largest Danish clubs is struggling financially and was close to bankruptcy in the beginning of 2013. Looking at the latest annual financial statements, the Danish Premier League (Superliga) has returned a slight decrease in the total turnover of 2.4 billion DKK in 2010 to 2.3 billion DKK in 2011 (Storm, 2012). However, despite the huge amount of money in professional football, a remarkably low amount is spent on developing talented players. Most of the finances in the clubs are spent on salaries for the professional department. Despite the potential to cut costs while aiming for talent development, this is not the first and foremost priority of professional clubs. The primary concern is achieving good results and winning the next game, thereby satisfying the expectations of sponsors and the media (Storm, 2012; Mielke, 2007). This "short-termism" of football (i.e., a need to win, avoid relegation and survive at all costs) impacts the organizational position, philosophy and subsequent operating culture of the organization (Nesti, Littlewood, O'Halloran, Eubank, & Richardson, 2012). Examples from English football provide an insight into the impending issues at hand in Danish football. In 2005-06, English professional clubs invested 66 million pounds a year between 92 English Premier League clubs. However, only 3.3% of football's turnover is spent on talent development, which could explain the fact that "one per cent of boys who furnish domestic football club first teams and senior international teams" (Green, 2009, p. 7). The overall aim of every professional club is to develop talented players who, at a later age, will be good enough to make the transition to professional level. Despite the fact that this example is from English football, that operates within a different culture, it provides insight into similar issues in Danish football that are relevant for this

dissertation. As demonstrated in the example, a low level of turnover is invested in talent development. Regardless of the amount, the overall picture is that professional clubs do not spend a substantial percentage of their turnover on talent development in professional football in Denmark, even though the aim is to develop talented players. Taking these ideas forward, and in relation to the financial conditions for professional football clubs, it is clear that some of the problems are associated with the missing link between the professional and youth departments. The professional department and results take first priority and usually "the first team is the 'engine of the club' and everything else appeared to move around it" (Relvas et al., 2010, p. 173). Together, these examples demonstrate that the logic used in professional football seems to be that: 1) professional football is characterized by vast amounts of money, 2) the predominant aim of youth development programs and clubs is to develop players for the professional department, 3) the clubs are in need of systematically organized talent development structures for a steady flow of talented players (especially in Denmark), 4) however, a low amount of the club's annual turnover is spent on talent development. This chain of events and somewhat paradoxical logic of professional football clubs reveals a "gap" between external demands and internal logic that could have a negative impact on the quality of talent development and number of talented footballers that reach national level. This argument is not far from the point, as Danish talent development systems apparently struggle to keep up with neighboring countries in the development of the next generation of international footballers.

Danish talent development systems and their effectiveness

Nowadays, Danish football in general is characterized by a traditional and collective approach to challenges and solutions in the game. For many years, the Danish national team favored possession of the ball and nowadays, Danish teams are organized in appropriate systems and the style of playing is founded on ball-and running patterns (Bordinggaard & Henriksen, 2008). These conditions provide the basis for the players to develop individual skills that are needed for

performing at national level. Recently, the Danish talent development models have shifted towards training and developing the skills associated with gaming intelligence, such as perception, overview, split vision, scoring ability and ability to read the game (Bordinggaard & Henriksen, 2008). Besides developing sport-specific skills, the organizational structure of youth football has lately received more attention and the conditions for talent development in Denmark have improved at national level. The under-17 league (the best of under-17 football in Denmark) consists of 14 teams that play to win the annual league. However, none of the teams is relegated, which provides solid conditions for talent development (also evident in under-15 and under-19 football). The individual clubs are able to spend time working with the quality and process of each player as winning or losing each weekend is not necessarily related to "life or death" in the league at the end of the season.

In the past decade, DBU has created a foundation for talent development in football, named the "red thread". The red thread is a foundation that provides descriptions and directions for how to play football and applies equally to all professional clubs in Denmark. In these descriptions, DBU strived to integrate notions of a more offensive style and creative and game-intelligent players ("DBU Bulletin", 2007). Furthermore, these efforts strive to create a stronger foundation for the transition from youth to professional to national level in Denmark, emphasizing deliberate play (similar to the notions of Côté, Lidor & Hackfort, 2009) and optimal utilization of potential of those involved in football. Over the years, the quality of youth football has improved at national level, but looking back in time and at the big picture (and figures), Danish talent development is still not ranked among the best at international level. The Italian Football Association (in collaboration with the Research Centre in the Technical Sector) published in 2005 a report about the best academies in Europe (Piani & Sartini, 2005). The report revealed that the Danish academies (and their ability to develop talented players) were ranked from no. 155 to 223 in Europe, based on developing between three and four players (B93 no. 155, AB Copenhagen no. 197, Brøndby no. 202, OB no. 223) for the six major European leagues (England, Holland, Germany, Italy, Spain and France). This ranking

is different today, however, and this reflects the issues at hand and the fact that Danish football is not among the best in Europe and Scandinavia, despite high levels of expectation. The best academy in Europe in the report was, surprisingly, Ajax with 46 players, surpassing Real Madrid and Barcelona. Among our neighboring countries, Bring and Dolsten's (2012) study on youth players in professional football revealed that between 2000 and 2011, Sweden exported 3,089 youth players in comparison to only 223 from Denmark. Despite the predominant aim of clubs and the football association to develop a stronger foundation for talent development, Sweden (with less than double the population of Denmark at 9.1 million) are almost 14 times more efficient than Denmark in exporting players to other European (i.e., international) clubs. If numbers in any way reflect the quality of the football associations, these examples demonstrate that Danish talent development systems and academies have room for improvement in Scandinavia as well as at the international level. Together, these examples of social, cultural and financial factors describe that talent development in Danish football could be even more effective. One factor that is described as crucial for effectiveness and performance is sport psychology (e.g., Abbott & Collins, 2004), however, this area still struggles to be a part of the talent development process and is not integrated to the same extent as the physical, technical and tactical areas in Danish professional football.

Sport psychology – an important part of the talent development process?

Until recently, the sport psychology profession in Denmark was characterized by a diversity of approaches with little overarching consensus on the professional philosophy and intervention strategies among consultants in the field. In 2008, Team Denmark (The Danish Institute for Elite Sport) established a sport psychology team with the aim to enhance the quality and consistency of applied sport psychology services (Henriksen, Hansen & Diment, 2011). Based on this initiative, DBU and Team Denmark started to employ psychological services in working with youth national teams and the women's national team. Today, all top-level football clubs provide services for players to develop their talent (technical, physical and tactical) and combine school and football

training during adolescence. However, only a few clubs provide sport psychology services for youth as well as professional players. The apparent lack of psychology in football seems paradoxical, as talent development in football is still characterized by an intensified professionalization (Roderick, 2006), totalization (Heinilä, 1982) and globalization (Maguire & Stead, 1998). In this process of professionalization and totalization, sport psychology becomes an important factor as a way to optimize the performance of a team or an athlete. Danish football is also part of the increased professionalization and totalization of sports (Persson, 2011), and the majority of Danish football clubs are not able to buy enough foreign professional players for their first team. The price of skilled football players is continually rising. Therefore, Danish clubs put their faith and efforts into talent development, and the predominant aim of youth development programs is to develop players for the first team or with a view of selling them (Christensen & Soerensen, 2009; MacNamara, Button, & Collins, 2010a; Relvas et al., 2010). This demonstrates that clubs need to consider the psychological consequences of this development and hence the necessity of even better integration of sport psychology in youth football academies.

Sports organizations must provide a constantly marketable product (i.e. results, entertaining performances, star players) to a set of highly demanding external stakeholders (e.g. fans, media, sponsors) (Mielke, 2007) for the business to achieve its short and long-term aspirations (Cruickshank & Collins, 2012). These conditions most likely have a particular influence on the club's talent development strategy (e.g. focus on physical maturity instead of potential), and therefore the young talented players make the transition to professional football (Christensen & Soerensen, 2009; MacNamara et al., 2010a; Relvas et al., 2010). In order to keep up and stay competitive on national and international levels, there is a need for clubs to recognize that the players' resources and psychological skills are a key factor for coping in future transitions (Alfermann & Stambulova, 2007). In order to do so, clubs need to integrate sport psychology as a part of talent development and the organizational culture of the team and club. However, several external and internal barriers (e.g., financial and team integration issues) seem to restrict the

possibilities for a practitioner (i.e., sport psychology consultant) to have a positive impact on teams (Johnson, Andersson, & Fallby, 2011). Internal barriers and the lack of psychology in football could be related to the culture of football. The greatest barriers to using practitioners were found to be lack of knowledge and skepticism about the field, unclear descriptions of services, and problems integrating with the team (Johnson et al., 2011). British research similarly showed that practitioners are often (and mistakenly) viewed as problem fixers as opposed to architects of hurricane-proof, long-term psychological foundations in athletes (Harwood & Steptoe, 2012). The culture of football at team level is, in many ways, dominated by the coach and his perceptions regarding the integration of psychology as a natural element in the development of footballers. However, Johnson et al. (2011) describe that: "Some coaches also articulated a fear and a negative perception about sport psychology consultants because of a distorted prior knowledge about the potential of sport psychology services, such as perceiving it as "mumbo jumbo" or just about relaxation training in the locker room" (p. 315). This perception of psychology in football can be devastating, as the coach in many ways is the bearer and creator of sport psychology as a part of the organizational culture in the club and team. Clearly, internal and external barriers exist, but the approach of the practitioner also could be part of the problem regarding integration of psychology in football. Few studies have actually advocated a developmental, strengths-based approach to interventions that take behaviors from good to great (Collins, 2001) or that strengthen existing psychological skills and behaviors for future developmental periods and transitions, where the resilience of an athlete will be tested more assiduously (Harwood & Steptoe, 2012). These perspectives point toward general problems of integrating sport psychology as a part of professional football. One problem is how the practitioner applies sport psychology and another is the culture of football.

International research on delivering sport psychology services in football

In the international research, the apparent reason for a lack of sport psychology in football could, as suggested, be associated with the culture of football as well as the approach of the

practitioner. The field of sport psychology has been slow to involve cultural aspects and broad societal factors or to learn from these relevant sources. However, lately, organizational research in the quest to optimize performance has received considerable attention (Stensaker & Langley, 2010). One of the demands placed on sports organizations is to continually "renew an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers" (Moran & Brightman, 2001, p. 111).

Previous research in talent development has focused on individuals as well as the path to elite level (Stambulova, 2009), and recently more research has focused on a holistic ecological approach of talent development. This results in shifting the focus towards interactions and culture as essential aspects of successful talent development environments as well as sport psychology delivery in elite sport. Despite the vast amount of research in the area, it seems that psychology, as an element of development in football, is not well developed, which seems to be related to the culture of football. In comparing psychology to other developmental areas of football, we can see that physical trainers work on tangible and valued aspects of training (physical dimensions = hard science), while psychologists are involved with a less objective and more abstract area of development (psychological dimensions = soft science) (Dosil, 2006). Because it is difficult to establish major structural changes to systems, it is difficult to embed sport psychology as this would entail major changes in football, however both coaches and players have been ignorant of its existence (Johnson et al., 2011; Dosil, 2006). Sport psychology is perceived as one of the factors that is essential to peak performance in sport, despite the fact that few people systematically train this aspect of development (Johnson et al., 2011; Dosil, 2006).

In line with these perspectives, recent literature on football and psychology (Relvas et al., 2010; Nesti, 2010; Dosil, 2006; Johnson et al., 2011) claims that for practitioners to be effective in sport organizations, they need to understand the culture within which they are operating. MST has been a popular focus of practitioners over the past four decades (Holland, Woodcock, Cumming & Duda, 2010). The delivery of sport psychology is a complex process in sport organizations and the

lack of theoretical breadth as well as the dominance of MST could have created problems for practitioners working in professional football (Nesti, 2010). Surviving and thriving as a practitioner in professional football is also associated with something more (e.g., empathic, compassionate and altruistic qualities) than just an understanding of MST (Gilbourne & Richardson, 2006). Organizational studies and the experience of practitioners point to the fact that working within an environment means providing services where there are other distracting influences, such as organizational stresses, pressure, external demands, media intrusion, contract negotiations and the presence of agents (Nesti, 2010; Woodman & Hardy, 2001). The approach of practitioners in football highlights that top-level footballers, due to their recent elevation in status and specific training as a footballer, require a more holistic approach to mental skills and counseling (e.g., working with self-knowledge, identity, footballer as a whole person) (Gilbourne & Richardson, 2006; Nesti, 2010). Moreover, the literature has further demonstrated that the delivery of this service should be organized to meet the needs of the young athletes (Visek, Harris, & Blom, 2009), revealing that working with individual athletes is not necessarily about providing tools but working with the person behind the athlete. Relatively new and inexperienced practitioners working with young athletes often use MST as an entry into the profession, although the sport psychology industry "has a much deeper and more profound role to play in youth sport (and youth-coach education) compared with any other life stage" (Harwood, 2008, p. 131). Together, these perspectives highlight that for practitioners to be effective in sport organizations, they need to understand the culture within which they are operating in order to go beyond the use of MST.

The link between theory, research and practice in sport psychology

The literature surrounding talent development may provide an explanation as to why MST has been the preferred sport psychology tool over the past four decades (Holland et al., 2010). This could be related to three linked but different perspectives in understanding athletic talent, namely the biological, psychological, and social perspectives. Each of these perspectives facilitates the

processes of learning, mastering a particular sport and directs the attention of coaches and practitioners to the talent development process (Stambulova, 2009). Firstly, there is the biological perspective, in which talent refers to an athlete's innate potential or giftedness (e.g., anthropometric data, structure of muscles, and sensitivity of sensory systems) (Stambulova, 2009). In this perspective, coaches and practitioners work with identification and selection of those athletes with the greatest potential for success. Secondly, there is a psychological perspective which views talent as the athlete's acquired abilities, competencies and skills that facilitate athletic performance and help achieve athletic excellence in the chosen sport(s) (Stambulova, 2009). In this case, coaches and practitioners adopt a talent development approach: what is the optimal pathway for any motivated athlete to the elite level in terms of age of specialization and different types of training? These two perspectives reflect the nature versus nurture talent debate in sports science (Stambulova, 2009). In this case, a practitioner working with the relatively simple tools of MST is informed by the psychological perspective in talent development, despite the need for more complex approaches for working in complex organizations. Finally, talent can be understood in relation to interactions in the specific talent development environment. What characterizes environments and programs that manage to continuously produce top-level athletes (Henriksen, Stambulova, & Roessler, 2011)? The talent development environment approach has only very recently been developed in international sport psychology. It is an ecological approach to athletic talent development – one that focuses on the whole athletic talent development environment (ATDE) rather than on the individual athlete and that stresses the role of interaction between the person and his/her context (Garcia Bengoechea, 2002; Garcia Bengoechea & Johnson, 2001; Krebs, 2009).

Overall, the three perspectives on talent development are important as each perspective directs the attention of the practitioner to a certain method of sport psychology service delivery. Therefore, the understanding of athletic talent (whether biological, psychological, or social) directs or informs the practice of sport psychology in specific contexts. The link between research and practice is clearly formulated in the practitioner researcher model (Jarvis, 1999) and the modern

scientist-practitioner model (Lane & Corrie, 2006). Both underscore the importance of reflective practice and being an explorative researcher while doing applied work with clients. Ryba and Wright (2005) point out that such praxis works with elements of theory, research and practice and further bridges the gap between academic and applied work. In this case, the practitioner is a researcher who relies on theory in the assessment of a problem and decides on a strategy to solve it, and the reflections (often based on dominating theories and research trends) that a practitioner brings to the situation influences his/her assessment and thereby the intervention strategy (Henriksen et al., 2011; Jarvis, 1999; Lane & Corrie, 2006).

As an example, if a practitioner adopts a psychological approach, the practitioner is informed (i.e. guided) by the belief that he/she should develop a certain skill set that underpins the pathway to excellence. This could be achieved by equipping the athlete with a mental skills package to overcome obstacles along his or her career. The ecological approach underscores the importance of reflective practice and being an explorative researcher while doing applied work with athletes (Henriksen et al., 2011). However, if the practitioner adopts the ecological approach, it changes his/her assessments and strategies when working with athletes. It would mean shifting the focus from MST (psychological approach) towards working with talented athletes in relation to interactions in the specific talent development environment. Therefore, it is important that the practitioner is reflective about his/her own presumptions before the intervention, regardless of whether a biological, psychological or ecological approach to talent development is taken.

Reviewing literature in talent development and ecology in sport

The major focus of the field of talent development in the 1970s and 1980s was based on the athlete's innate preconditions (the biological perspective) and the development of programs, talent selection systems and sport talent detection models (Durand-Bush & Salmela, 2001). In the 1990s, there was a shift towards prioritizing the acquired part of talent (the psychological perspective) and the evolution of talent development and athletic career models (Stambulova, 2009). More recently,

the psychological perspective has been further developed in a new trend regarding talent development environment models and a social perspective in understanding athletic talent (Stambulova, 2009). This trend is characterized by, among other things, the holistic ecological approach is built on systems theory and has made an impact on the literature in talent development. In reviewing the literature, however, remarkable differences are revealed between the aims, methods and different approaches within systems theory and ecology (e.g., decision making or interaction). The aim of this dissertation is not to incorporate all literature involving sport and ecology but to select and introduce the literature relevant for a study of the interactions and the role of the environment in elite sport and talent development.

A review of existing literature revealed a limited amount of research focusing on the role of the environment in talent development in sport. A database search (Scopus) and snowball sampling (Patton, 1990) in relation to sport and ecology, environment, culture and ecological psychology yielded 341 references. This search was further limited to psychology, social sciences and keywords such as sport, talent, talent development or elite, and research related to ecological approaches to cognition, perception, decision-making, expert performance and skills acquisition in sport was omitted. In total, 17 references and five categories could be selected: (1) theoretical discussions of ecological models of human development and its potential contribution to the area of talent development in sport (e.g., Beek, 2009; Garcia Bengoechea, 2002; Garcia Bengoechea & Johnson, 2001; Krebs, 2009; Araujo 2007); (2) research into the role of the elite sport environment in fostering positive youth development (e.g., Strachan, Côté, & Deakin, 2011); (3) studies of the developmental path to elite level in sport, pointing to the role of the club environment and town size (e.g., Carlson, 1993; 2011; Duffy, Lyons, Moran, Warrington, & MacManus, 2006); (4) investigations of talent development environments based mainly on interviews with highly qualified youth sport coaches about the goals and systems they perceived to be necessary for effective talent development environments (e.g., Martindale, Collins, & Abraham, 2007; Martindale, Collins & Daubney, 2005; Wang, Sproule, McNeill, Martindale, & Lee, 2011); (5) case studies (based on

interviews and participant observation) of specific sporting environments with a successful track record of producing elite level athletes from among their juniors (e.g., Henriksen, Stambulova, & Roessler, 2010a; 2010b; 2011).

Within these five categories, a range of methodologies, informants, cultural settings and aims emerge across the literature. The yielded references furthermore represent a gap in research, as very few articles involve the role of the environment in talent development. Categories four and five are both relevant. However, categories one, two and three are not significant for this dissertation because, although they investigate three different areas of ecology in sport, they do not examine the environment in talent development. An in-depth study of the research in categories four and five reveals specific characteristics of successful environments. Environments are more likely to increase the production of senior elite athletes if they: organize supportive training groups with clear and supportive links to the senior athletes; maintain a holistic view of the athletes and focus on their long-term development; stay open to inspiration from other sports; build and maintain a strong and coherent organizational culture with consistency from philosophy to methods; and, finally, if they integrate and coordinate their efforts systematically to create synergy among all the people involved in the athletes' lives. These characteristics are all important for this dissertation. Despite the similarities between the two categories, they are based on two different methodologies that are relevant to this dissertation.

Across the two categories, there is only a limited amount of research on ecological perspectives in elite sport. They involve several studies within individual sports and across different sports but involve no team sports. Consequently, the review highlights and underscores the need for more research regarding the characteristics of excellence in successful talent development environments in team sports. In particular, in acknowledging that the impact of sport psychology in talent development is related to social, cultural and financial factors, there is a specific call for a case study in football.

CHAPTER 2. AIM OF THE DISSERTATION

This dissertation aims to formulate new principles for how to apply ecologically-inspired sport psychology to the development of football players. I have chosen the title: *"Made in Denmark" Ecological perspectives on applied sport psychology and talent development in Danish professional football*. This title points to the three interrelated perspectives that are fundamental to this dissertation. Firstly, *"Made in Denmark"* points toward a need for integrating culture in the assessment and interventions as well as the reflective practice of the practitioner. The importance of culture has so far been neglected in the practice of sport psychology in organizations and clubs. However, researchers and practitioners point to the fact that it is crucial to be reflective about this part of the intervention when delivering sport psychology services in elite sport. Secondly, this dissertation adopts a new approach towards sport psychology services in professional football. The ecological approach emphasizes that the practitioner needs to work with talented athletes and especially be aware of and work with the interactions and roles in the specific talent development environment based on a thorough assessment of the specific environment. There has been a tradition of applying MST as a universal tool for handling complex psychological issues and problems in complex organizations. However, this dissertation aims to make explicit the need for intervention strategies (and not simple tools) that are able to integrate and work with the complexity within professional clubs and organizations. Thirdly, sport psychology is still viewed upon with skepticism in professional football and intervention programs too often deal with the immediate problems at the expense of developmental and preventive consulting. Therefore, the goal of this dissertation is to champion a developmental and ecological approach in sport psychology delivery that takes behaviors from good to great and strengthens existing psychosocial skills and behaviors for future developmental transitions (Collins, 2001). In order to reach these goals, research based on the context in talent development and sport psychology should be applied. Accepting the context and broadening the frame of research means opening up the role of culture and the environment in

applied sport psychology and talent development in professional football.

This dissertation specifically aims to **lay out the constraints upon, and preconditions for how to apply sport psychology from an ecological perspective in a successful Danish football academy**. In order to reach the aim, three interrelated research questions will be answered:

The **first** objective is to uncover the development of psychosocial skills in young football players in relation to their micro and macro environment, and therefore the intention is to explore: (a) Which psychosocial skills are important in a youth football academy? (b) How are these psychosocial skills practiced in the environment?

The **second** objective is to (a) provide a holistic description of a successful ATDE in a team sport (i.e., football), namely AGF football club in Denmark. Specifically to: (b) examine factors influencing the environment's success in developing future professional players, and (c) analyze if and in what ways the eight features of a successful ATDE are present in the environment.

The **third** objective is to provide a detailed description of an intervention program from an ecological perspective and uncover the participants' experiences during and after the intervention. The agenda is to reinforce the culture of psychosocial development in the daily practice of a professional football academy, provide skills to succeed at professional level and create stronger relations between youth and professional departments.

If the dissertation is able to meet and answer these research questions, I believe that the purpose could be expanded to include description of models and mechanisms that are pivotal for developing talented footballers as well as professional training and development of applied sport psychology practitioners. As regards talent development, the ideas in this dissertation are not only aimed at developing the individual player but are also applicable for coaches, sport psychology consultants and other practitioners who employ psychology in sport and exercise settings. A long-term aspiration of the dissertation should be considered in relation to the methodology. It is a desire that the dissertation and the empirical work are perceived as communication and information that disrupts or somehow changes the current football culture. The ambition is therefore to describe and

provide new and different perspectives on how to apply sport psychology that hopefully encourage the world of football to perceive sport psychology differently and as an additional element of professionalization and totalization in the talent development process.

Guide to the following chapters

In order to answer each research question and fulfill the overall aim, the dissertation is based on the following chapters. **Chapter three**: "Theoretical perspectives" will take a first step into systems theory and look at key concepts of the dissertation. The theory of Uri Bronfenbrenner provides the theoretical foundation of the dissertation; the main concepts of his theory will be presented and are fundamental for the fulfillment of the objectives. Following this, I will introduce holistic and ecological working models, describe how these models are adaptable to describe successful talent development environments and their success and how these models inform the work of applied sport psychology in professional football. The theoretical perspectives serve as the foundation for **Chapter four**: "Methodology". I will describe the methodological considerations in relation to frameworks and concepts of the dissertation, including why I have chosen a case study as the research design. A thorough description of the research design of the dissertation and the contact with the club and players will be provided. The theoretical perspectives and methodology lead to **Chapter five**: "Findings". In this chapter, I will briefly describe the findings of the three papers linked to this dissertation. Firstly, I will present the club and the participants and then outline the aim, theory, findings and conclusion of the individual papers. Together, the short descriptions of each paper serve as a frame of understanding and foundation for **Chapter six**: "Discussion". In this chapter, I will discuss the findings in relation to the aim of the dissertation, the chosen theoretical perspectives, and the wider practical implications related to the objectives of the dissertation. In order to answer the question of "how to apply sport psychology from an ecological approach in a successful Danish football academy", I will describe how the individual papers contribute to the aim and finish the discussion by describing a framework for applied sport psychology and six

governing principles to inform applied sport psychology from an ecological perspective. In line with the discussion, **Chapter seven**: "Reflections on the research process" grasps hold of and discusses the concepts of validity and reliability in this dissertation. Moreover, I will describe weaknesses and strengths of the research design and my dual role as researcher and practitioner. **Chapter eight**: "Conclusion" will make concluding remarks in relation to the dissertation and its findings as a whole. Finally, the **"Epilogue"** and last chapter will, through Vialli's lens, set out to answer the question posed in the Prologue: "how would I describe Danish football culture and what should we call her?"

Parameters of the dissertation

This dissertation provides the opportunity to deal with relevant themes in depth, yet there is a limited amount of space thereby I am going to highlight some areas over others that are important for each chapter. The first research question concerns psychosocial skills in a youth academy. In reviewing relevant literature, we see that psychosocial skills are often associated with terms such as life skills, positive youth development, social-emotional growth (Gould & Carson, 2008), psychological skills (Danish, Petitpas & Hale, 1995), psychological characteristics (MacNamara et al., 2010a; MacNamara, 2011) or psychosocial competencies and assets (Harwood, 2008). Despite the relatedness of all these different terms, this dissertation will not make a comparative analysis of the terms, even though many are closely related to psychosocial skills. But I will describe and discuss how psychosocial skills are important for transitions to professional level in professional football.

The second research question concerns the characteristics of the AGF football club as a successful talent development environment. This research question concerns ecology and associated keywords such as environment or culture or ecological psychology that focus on interactions in the environment. This means that this dissertation does not address subjects and other related terms such as organizational culture, community psychology, ecology in cognition, decision-making, skill

acquisition or related subjects. Moreover, I will not discuss differences and similarities between these associated terms and ecology in this dissertation.

The research by Henriksen et al. (2010a; 2010b; 2011) and the holistic ecological working models serve as an applied foundation for this dissertation. Their research is based on a method that is similar to that used in this dissertation and examined environments as a whole and in similar contexts. Other similar models could have been used to describe the ecological or environmental perspectives, such as research by Martindale et al. (2005; 2007). I chose not to adopt the concepts used by Martindale et al. (2005; 2007) because compared to Henriksen's work, I did not find Martindale's work as comparable to the aims of this dissertation. Firstly, the method used by Martindale et al. (2005) offers an overview of key themes apparent in the literature that have relevance to the effective development of talent. The authors highlight similar features as the work by Henriksen and colleagues but the work by Martindale and colleagues is based on interviews and not case studies in actual successful environments. Secondly, the Martindale et al.'s paper (2007) is based on interviews involving 13 different sports including football and what they found important in talent development environments (what they did and what they thought would characterize a successful environment) and with different variables across themes and not related to one specific environment. Finally, Martindale et al.'s (2007) concepts have not been adapted to a specific environment but deal with different sports (individual as well as team sports).

In regard to the inclusion of participants, it may have been relevant to include a wider sample. In this case, I have focused the dissertation at the micro level in AGF football club. I have therefore not researched into – but do address – the macro level (municipality or national football association) and its influence on the micro level in the club. The intervention (Paper III) is ecological but not holistic and the applied work therefore did not include the school or the families of the players that may have been relevant but were considered too comprehensive for the aim of this dissertation.

CHAPTER 3. THEORETICAL PERSPECTIVES

In this chapter, I will explain the epistemological foundation, the theoretical perspectives, the holistic ecological approach and working models that have been used in this dissertation. The models are included in this chapter because they represent qualified attempts to develop a concrete operationalization of a theoretical approach. In this respect, they do not constitute a theory as such, but an approach as to how to put theory into practice.

The epistemological foundation

Sport psychology continues to operate within a predominantly positivist view of science and reality and much of the qualitative research in sport psychology appears to embrace a post-positivistic stance (Krane & Baird, 2005). Post-positivist researchers loosen the strict positivistic belief in value-free inquiry, yet they still embrace traditional evaluation criteria and often quantify their data (Denzin & Lincoln, 2000). A criticism of this stance is that their goal is to produce a detached, valid, and generalizable research product. Following the notions of Krane and Baird (2005), this dissertation entails a departure from positivism into paradigms that are, as yet, largely uncultivated in sport psychology (Krane & Baird, 2005). As outlined before, this departure also includes a departure from linear models of intervention (e.g., MST) to ecological perspectives (e.g., working in and with the environment) in the practice of sport psychology. This means shifting the perspective from linear and positivist models and belief systems toward viewing the world in complexity (Luhmann, 2000). Within qualitative sport psychology, researchers have described the methods employed in this research; however, little attention has been paid to belief systems, or the epistemological foundations for those methods. Rarely have researchers adequately explained the underlying foundations for their choice of methods and analytical strategies. This is an absence that needs to be addressed, as the type of background is important in order to understand the author's interpretation of findings. Additionally, previous research (e.g., the biological perspective in talent

development, see Stambulova, 2009) is founded on a preference for the static (e.g., talent development as a linear process), the permanent and reification in the world (*being*), contrary to the movable, the dynamic and the process (*becoming*). *Being* represents the static perspective by claiming that nothing in the world changes. *Becoming*, on the other hand, represents the opposite dynamic perspective by claiming that everything changes. *Being* is said to be the dominating perspective throughout the western way of thinking and in many ways constitutes what we today understand as cause-and-effect causality (Christensen, 2003). Therefore the theoretical foundation and belief system of this dissertation aims to grasp the complexity of the world and therefore the dynamic perspective of changes and the movable and the process. *Becoming*, or in other words, how the world is constructed, is pivotal to, and underpins, the methodology of this dissertation.

Being related to processes, constructivism or constructionism are often terms that are connected to meaning and understanding as a central part of human activity; however, the two concepts are not synonymous. Constructivism describes the universal processes of the organism, from which the structure determines the organism's own production. Luhmann's (2000) theory of social systems is described as an operative form of constructivism whereas constructionism is often followed by the word "social", and can be seen as a more interactional, exogenous form of constructionism. In this sense, it is a construction of a common process where we create the environment that simultaneously creates us (Rasmussen, 1996, p. 106, 129). According to Luhmann (2000), the only way to reach the complex realms is by expanding the complexity in your research design, which corresponds to the constructs of system theory used in this dissertation and to the perspectives of Bronfenbrenner (1979; 2005). Following these notions, no simple model of explanation (instrument or tool) can account for complex phenomena. This also applies to research into how to apply ecological perspectives in talent development and sport psychology.

Systems theory

The theoretical framework of the dissertation is built on central principles of systems theory

and founded on the belief system that the world is constructed on the arrangement of and relations between the parts, which connect them into a whole (cf. holism). This particular organization determines a system that is independent of the concrete substance of the elements (Kneer & Nassehi, 1997). Systems theory is rooted in constructionism and constructivism. Despite the fact that constructionism and constructivism are not synonymous terms, they are both connected to social processes as a vital part of meaning and understanding in human activity. A system is composed of regularly interacting or interrelating groups of activities/parts which, when taken together, form a new whole. In most cases, this whole has properties that cannot be found in the constituent elements (Kneer & Nassehi, 1997). Therefore, the whole is never fully understandable. Even if we try to perceive the whole, we are only able to handle parts of the whole at any one time – for example, in trying to understand the world of football or club as a system. Systems theory encompasses several areas of science (Kneer & Nassehi, 1997) and is applied in a vast arena of fields, such as psychology (e.g., Bronfenbrenner, 1979; 2005; Lewin, 1936), sociology (e.g., Luhmann, 2000), biology (e.g., Maturana & Varela, 1987). Additionally, systems theory has influenced consulting in family therapy (e.g., Selvini-Palazzoli, Boscolo, Cecchin, & Prata, 1980), consulting in organizations (e.g., Tomm, 1987), career assistance (e.g., Patton & McMahon, 2006) and development of organizations (e.g., Schein, 1990). The goal of this dissertation is not to encompass all elements of systems theory but to pinpoint the field of psychology in sport, i.e., researching into interactions and the role of the environment for talent development.

Bronfenbrenner's ecological psychology

Constructed on the same theoretical belief systems and foundation as in the field of psychology, Bronfenbrenner's (2005) bio-ecological model of human development stresses that talent development is affected by the complex interrelationship between process, person, context and time (PPCT model). Bronfenbrenner's contribution to the theory of human evolution can be divided into: (1) his early theory, that focused on the context (microsystem, mesosystem, exosystem

and macro-system)[1] and (2) his later theory, which put greater emphasis on processes and the role of the individual in his/her own development (Bronfenbrenner, 2005; Tudge, Makrova, Hatfield & Karnik, 2009)[2]. This dissertation is founded on the same beliefs as the later theory of Bronfenbrenner. Therefore, I acknowledge that the athlete as well as the systems in which the athlete is embedded are important for talent development as well as applied sport psychology in football. The work of Bronfenbrenner has not been applied to sport, but his later theory can serve as a theoretical foundation for an examination of the role of the environment in talent development. The following describes Bronfenbrenner's later ecological systems theory, which is focused on the environment, proximal processes and the person.

Environment. Bronfenbrenner (1979) describes the environment as a series of components that interact at different levels or layers, the so-called micro, meso, exo and macro environments. These are illustrated by a center (micro-environment), with rings spreading out into the surrounding and remote environments to varying degrees and often indirectly affect young talented athletes in the center of the micro-environment. In the "inner" circle is the micro-environment that represents the close environments of the young talented athletes who are directly involved in, for example, their daily training sessions. Surrounding the micro-environment is the meso-environment, constituting the total structures of micro-environments, such as relationships between family, club and school. Each of these environments is significant, but the relationships between these communities are also important. An example could be a flexible collaboration between the school and the club, which makes life easier for the young athletes, and provides focus on training in daily life. The third environment is the exo-environment. An example of an exo-environment could be the social contexts in which the young athlete operate, even if they do not directly participate in them. These contexts still have an impact on the athlete, such as educational systems with either flexible or rigid

[1] The early work by Bronfenbrenner (e.g., 1979) would be characterized as social constructionist, as he focuses on the systems and relations and does not focus on the role of the person in the context.
[2] The later work by Bronfenbrenner (e.g., 2005) would be characterized as social constructivist, as the universal processes determine the person's development and actions.

examination systems. Finally, Bronfenbrenner describes the macro-environment as the values, laws and traditions in the surrounding community or the overall cultural layers (e.g., national culture).

Proximal processes. The main shift from his early to his later theory is his new focus on the processes of human development. It was not until the 1990s that proximal processes were defined as the most important factor in development (Bronfenbrenner, 2005, Tudge et al., 2009). Subsequently, he also focuses on the Process-Person-Context-Time model (PPCT), which lately has become the essence of his theory (Bronfenbrenner, 2005). The full theory (environmental layers and proximal processes) deals with the relationship between the four PPCT concepts. In particular, Bronfenbrenner's later descriptions of the PPCT model can be used to describe an environment (Bronfenbrenner, 2005). The process plays a crucial role in development (the "primary mechanisms"). The examples that Bronfenbrenner provided (activities with peers, group interactions, reading, learning new skills) are the types of activities that regularly occur throughout life and that help individuals to develop. They constitute the engine of development, because it is by engaging in these activities and interactions that the young athlete creates meaning. But the nature of proximal processes varies according to each context in which he or she belongs, both spatial and temporal (Bronfenbrenner & Morris, 1998).

Person. Bronfenbrenner recognized the relevance of biological and genetic factors (Bronfenbrenner & Morris, 1998; Krebs, 2009). He divided these attributes into three types, which he called demand, resource and force characteristics. Demands are personal characteristics that create an immediate first impression on another person, such as age, gender, skin color and physical appearance. These types of properties can have an impact on first impressions and interactions, because they can give rise to a set of immediate expectations. Resources are not visible properties, but act first on mental and emotional resources, such as previous experience, skills and intelligence, but secondly also on social and material resources (access to good food, housing, caring parents, educational opportunities that fit the needs of the society and so on). Finally, the force characteristics have to do with differences in temperament, motivation, persistence, and the like. According to

Bronfenbrenner, two people could have the same resources (or performance), but different developmental pathways. An athlete can be motivated for success and continue to work hard in spite of adversity while another could experience lack of motivation and drop out of sport. Bronfenbrenner describes in his later publications how individuals can change their context (Bronfenbrenner, 2005). The change may be relatively passive and it could be the athlete that transforms the environment based on claims such as age, sex and skin color which make another person react differently. To more actively changes, as the ways in which a person changes the environment associated to his/her resources, whether it is physical, psychological or emotional.

Holistic ecological approach and working models

Elements of the ecological approach described above also formed the basis for the development of the working models described in this section. Even though the working models tend to simplify the more complex ecological psychology, both the ecological approach and the working models serve as a basis for this dissertation. The research by Henriksen et al. (2010a) is in many ways inspired by the early work by Bronfenbrener (1979). Henriksen and colleagues introduced a holistic ecological approach, with a focus on the environment in which prospective elite athletes develop in individual sports. However, the working models have not previously been applied to team sports and there are no existing intervention studies inspired by an ecological approach. The environmental and cultural perspective in the models is added in the sense that talent development also entails an emphasis on the context in which the talented athlete is developing. Such an environment is called athletic talent development environment (ATDE) and is defined as:

> …a dynamic system comprising a) an athlete's immediate surroundings at the micro-level where athletic and personal development take place, b) the interrelations between these surroundings, c) at the macro-level, the larger context in which these surroundings are embedded, and d) the organizational culture of the sports club or team, which is an integrative factor of the ATDE's effectiveness in helping young talented athletes to develop into senior elite athletes (Henriksen, 2010 p. 160).

The first model I will employ is the ATDE working model, which is a framework for

describing a particular athletic environment and for clarifying the roles and functions of the different components and relations within the environment. The environment is depicted as a series of nested structures. The young, prospective athletes appear at the center of the model, and other components of the ATDE are structured into two levels (micro and macro) and two domains (athletic and non-athletic). This working model does not correspond with the theory of Bronfenbrenner, as this model does not involve the meso and exo levels. However, in the empirical versions of the model (e.g., Henriksen et al., 2011) the interactions in the micro-level (or meso level) are among the most important for the successful environments.

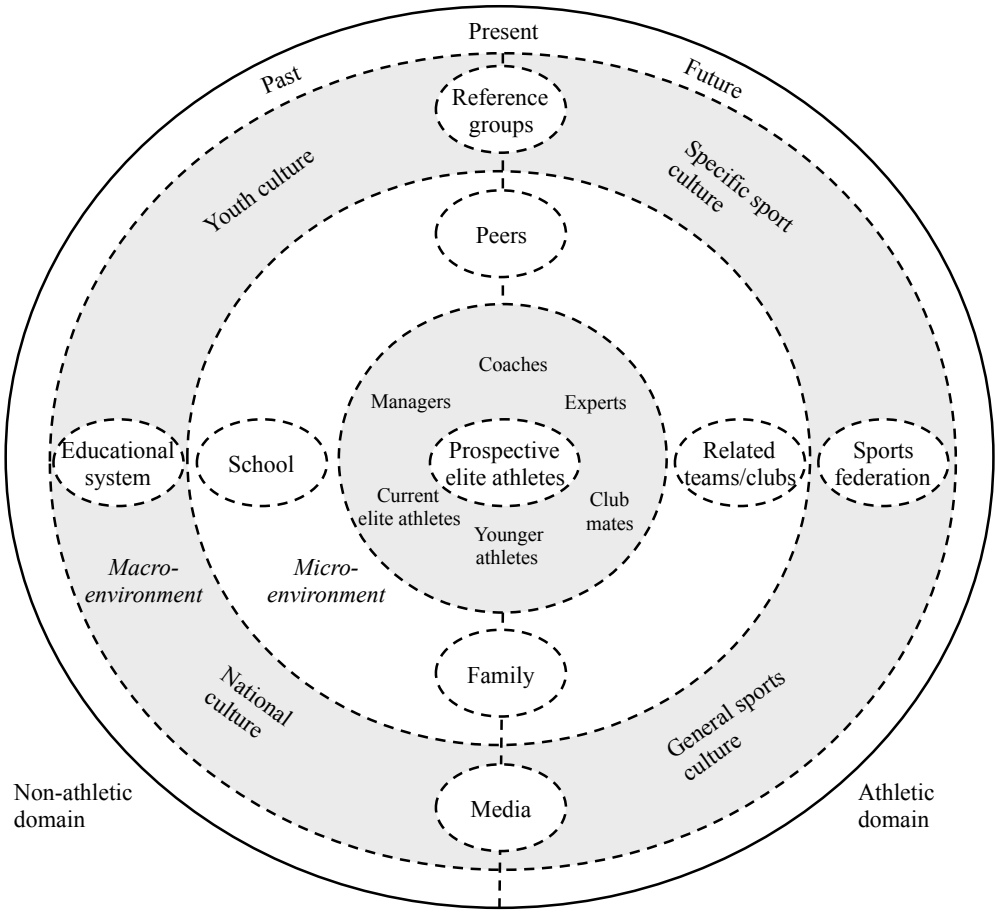

Figure 1. ATDE model, adapted from Henriksen et al. (2010a).

The micro-level refers to the environment where the prospective athletes spend a good deal of their daily life, such as the club environment (immediately surrounding the athlete), school,

friendship groups and family. The macro-level refers to social settings that affect the athletes, such as sport federations, media, the educational system and reference groups, as well as to the values and customs of the cultures (such as national and sport specific cultures) to which the athletes belong. The athletic domain covers the element of the athletes' environment that is directly related to sport, whereas the non-athletic domain presents all the other spheres of the athletes' lives. The outermost layer of the model presents the past, present and future of the ATDE, emphasizing that the environment is dynamic and the athletes and their contexts are constantly changing and influencing each other.

The second model, representing the holistic ecological approach, is the environment success factors (ESF) working model, which gives structure to the factors that provide the environment's success and has explanatory potential.

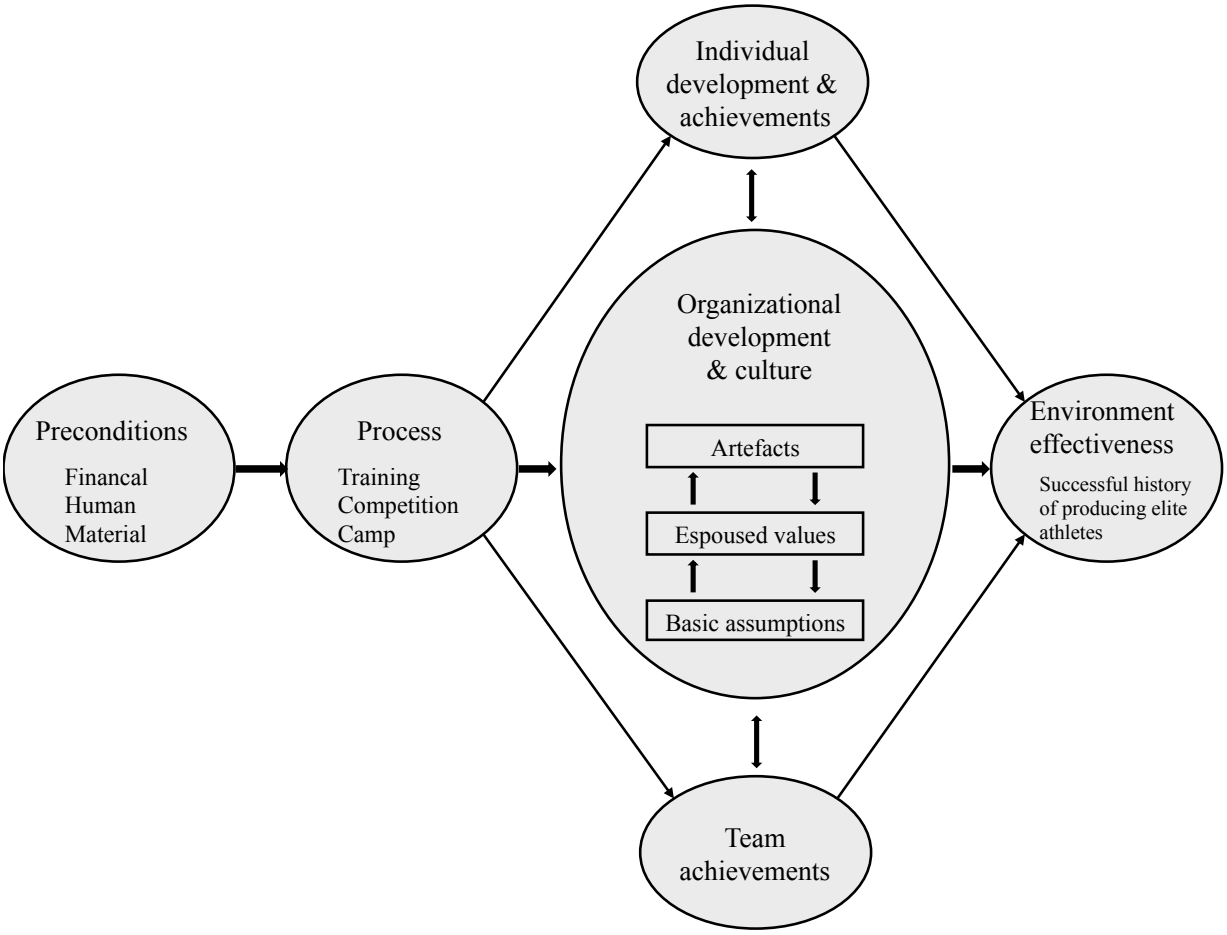

Figure 2. ESF model, adapted from Henriksen et al. (2010a).

The model takes as its starting point the preconditions provided by the environment (e.g., human, financial and material resources), which are necessary but do not guarantee success. The model then illustrates how the daily routines or process (e.g., training, camps and competitions) have three outcomes: the athletes' individual development and achievements (acquisition of psychosocial competencies and athletic skills), team achievements (not previously described in the literature), and organizational development and culture. All of these are highly interrelated and influence the environment's success. "Organizational culture" is central to the ESF model and consists of three levels. "Cultural artifacts" are visible manifestations such as stories and myths told in the environment, clothing, buildings and organizational charts. "Espoused values" are the social principles, norms, goals and standards that the organization shows to the world (i.e., what the members say they do). "Basic assumptions" are underlying reasons for actions that are no longer questioned but are taken for granted (strongly affecting what the members actually do). Organizational culture is characterized by the integration of the key basic assumptions into a cultural paradigm guiding socialization of new members, providing stability and adapting the organization to a constantly changing environment. The ESF working model therefore predicts that the ATDE's success (i.e., effectiveness in producing senior elite athletes) is a result of the interplay between preconditions, process, individual and team development and achievements, with organizational culture serving to integrate these different elements.

Differences and similarities between Bronfenbrenner and the holistic ecological approach

Comparing Bronfenbrenner's work with the holistic ecological approach reveals several similarities and differences. As previously mentioned, one of the differences is that the working models by Henriksen et al. (2010a) are inspired by the early work of Bronfenbrenner (1979). This means that Henriksen et al. do not integrate the PPCT model presented in the later work by Bronfenbrenner. Moreover, a criticism of the models (ATDE and ESF) is that they do not integrate

elements of the meso and exo levels (Bronfenbrenner, 1979; 2005) in the development of talented athletes. A review of the literature by Henriksen et al. (2010a) reveals that they integrate additional perspectives inspired by the systems theory framework (Patton & McMahon, 2006), which viewed ATDEs as systems with certain functions, components, structure and development. Despite the apparent weaknesses of Henriksen et al.'s work in not constructing the working models on the later theory by Bronfenbrenner (2005), there seem to be several similarities. When we look at the empirical versions of the models, we can see that interactions between the different agents in the environment (e.g., Henriksen et al., 2011) are a fundamental factor in the success of the specific environment. In that sense, despite the lack of meso and exo levels in the ATDE model, Henriksen et al. do integrate these notions in the description of their empirical models. Moreover, the ESF integrates process and person as essential for success (individual achievement and development) that were missing in the ATDE model.

Despite the fact that the theoretical foundation of this dissertation is based on the work by Bronfenbrenner (1979; 2005), the working models contribute to the application of systems theory in research in sport. Therefore, Bronfenbrenner and the holistic ecological approach form an important framework for this dissertation. Specifically, the ESF model contains an element that is important in researching into team sports. The area of team achievement and development is pivotal to understand and work in professional football, yet this part of the ESF model is not evident in Bronfenbrenner's PPCT model. A vast amount of research in team development and dynamics (e.g. Carron, Hausenblas & Eys, 2005) acknowledges the huge impact that team processes have on the person (e.g., skills developed), the context (e.g., roles, cohesion, leadership), and time (e.g. the life span of the team, time in development stages). These elements are not included in the PPCT model, but should be taken into consideration when working in talent development environments in team sports. Additionally, the ESF model is based on the organizational psychology of Edgar Schein (1990) and centers on the emergence of the organizational culture in the environment. It provides insight into whether values are espoused or/and enacted in the specific talent development

environment. These notions seem highly relevant for researching into the specific practice of the environment, which is not evident in the theory of Bronfenbrenner (2005). However, together the PPCT model by Bronfenbrenner (1979; 2005) and the working models by Henriksen et al. (2010a) describe the deeper theoretical understanding of development and provide a tool for analyzing the characteristics of a specific talent development environment in professional football.

CHAPTER 4. METHODOLOGY

In this section, I will explain the research methods that have been used in this dissertation. Since the aim of the dissertation is to shed light on the constraints and preconditions in applying sport psychology from an ecological approach, a nested (embedded) single case study and qualitative design were employed.

The case study as a research strategy

An exploration of talent development environments from an ecological perspective lends itself towards a method that is able to retain the holistic and meaningful characteristics of real-life events (Yin, 2009). Maaloe (2004) defined a case study as an "empirical inquiry that investigates a real-life phenomenon within its real-life context" (p. 5) and researching into "the natural occurring experiments" (Yin, 2009, p. 4), means studying phenomena that we do not control while we study them. The case study is, therefore, a strategy to empirically explore chosen contemporary phenomena in their natural context by using sources of data that can be used as proof of evidence (Robson, 2002). For these reasons, the case study was an appropriate methodological choice for this dissertation, as the aim was to work in and with the environment. The case study is a research strategy rather than a specific method. The case study is always bounded. It is a strategy to empirically explore chosen contemporary phenomena in their naturalistic context by using multiple sources of evidence that are used to build an argument (Robson, 2002; Maaloe, 2004). Stake's (1995) description narrows the definition of a case study down to:

> "A case study is expected to catch the complexity of a single case. A single leaf, even a single toothpick, has unique complexities – but rarely will we care enough to submit it to case study. We study a case when it is of very special interest. We look for the detail of the interaction with its contexts. Case study is the study of the particularity and complexity of a single case; coming to understand its activities within important circumstances … the case is one among others. In any given study, we will concentrate on the one. The time we spend concentrating on the one may be a day or a year, but while we so concentrate we are engaged in case study (Stake, 1995, pp. xi-2).

The approach of the case study

The case study approach recognizes the role of the researcher as co-constructor of the reality that is being studied. Many years ago, Lincoln and Guba (1985) asked a pivotal question, "How can an inquirer persuade his/her audiences that the research findings of an inquiry are worth paying attention to (p. 290)?" Like all social knowledge, the key issue relates to what makes for good qualitative research and values for quality in changing and situated local contexts (Tracy, 2010). The same issue resides in case studies and two long-lived and fundamental traditions and approaches in practicing case study research: the first is the bottom-up approach of progressive integration of composite theses grounded in elementary data; the second being the top-down test approach (Maaloe, 2004). The first stance is theory building, grounded in an inductive accumulation of data with no bias or favor towards any already chosen theory, and is most explicitly presented by the Grounded Theory as well as the Glaser-Strauss Approach. The second stance is theory testing. It is derived from Experimental Research and rigorously represented by the Popper-Yin Approach, using cases as the means to confirm or better yet, to reject any pre-chosen theories. The primary purpose of both Theory Testing and Grounded Theory is to provide explanation (Maaloe, 2004). Despite the differences between the two approaches, the common feature and principle of case studies is the notion that the researcher is not able to control the environment (i.e., interactions among persons); however, the researcher's own preconceptions, awareness and sensitivity to the environment is pivotal for the study. Based on the foregoing, and also taking into account the requirement to possess a sensitivity for the context, Maaloe (2004) suggests a third stance and a broader context than merely a search for explanatory evidence: namely an explorative integration, which is "a cyclic approach of a continuous dialogue between pre-chosen theories, generated data, our interpretation and feedback from our informants, which will hopefully lead to more inclusive theory building or even understanding" (Maaloe, 2004, p. 8).

Single case study and nested design

Based on an explorative integration approach, the dissertation is a nested single case study (i.e. embedded) design, involving more than one unit of analysis in a wider case (such as AGF football club) (Thomas, 2011, p. 95). Thomas (2011) draws a useful distinction between multiple case studies and nested (or embedded) case studies "as a subunit fitting in with a larger unit… and how each subunit connects with other subunits and the whole" (p. 152) (see Figure 3). While multiple studies are focused on comparing the different examples and contrasts are found between and among cases, the emphasis in a nested study is within the principal unit of analysis (Thomas, 2011, p. 153).

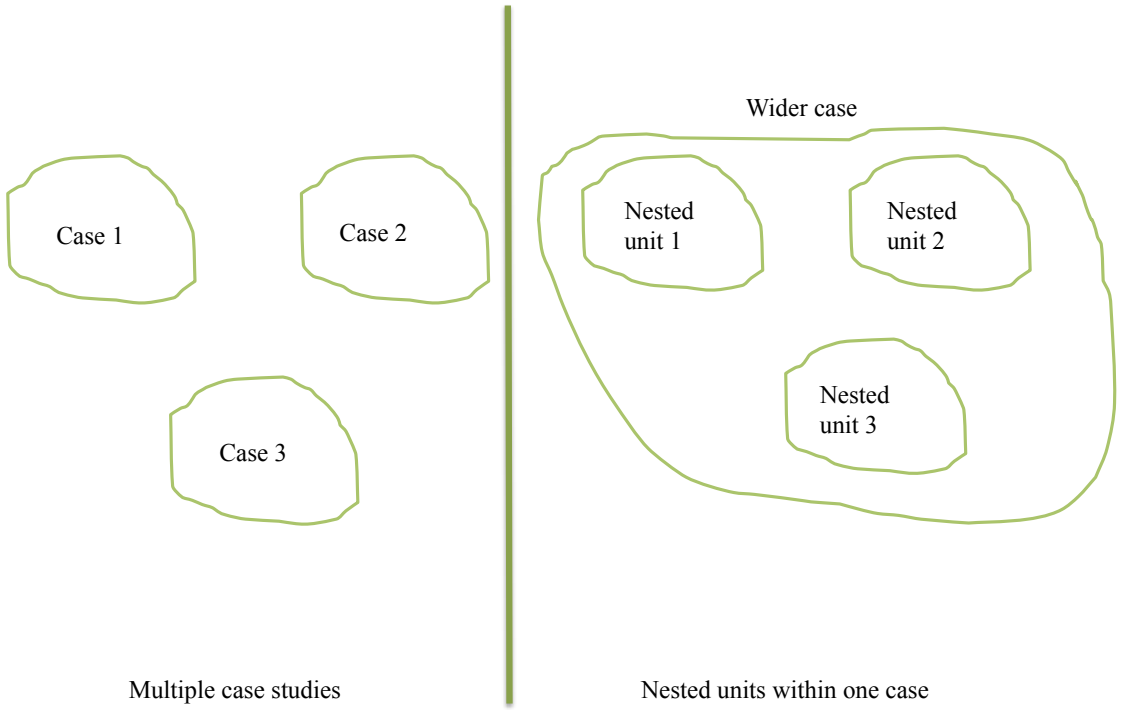

Figure 3. Illustration of multiple case studies versus nested design.

Thomas (2011) argues that the nested design is about using the nested subunits and comparing them. However this is not the aim of this dissertation, as the subunits are not comparable

to each other, but together describe the process and sequence in the whole case. One of the challenges of the nested design occurs when the case study focuses solely on subunit level and fails to return to the larger unit (whole case) of analysis. In this dissertation, there are three subunits (Papers I-III) that contribute to the wider (or whole) case (dissertation) and the theoretical generalizations are related to the wider case as well as to the three subunits. Performing a single case study and embedded design in this dissertation really meant performing a series of complete subunits (each paper) before embarking on the whole case and seeing how each subunit connects with other subunits and the whole. Based on systems theory, which dictates that the primary task is to understand the specific case as a whole, the analysis of each subunit was undertaken as a complete investigation.

Case selection

The case is considered a "paradigmatic case selection", since the case was selected with the aim "to maximize the utility of information from small samples and single case [and] to develop a metaphor or establish a school for the domain that the case concerns" (Flyvbjerg, 2006, p. 230). More specifically, this dissertation provides additional and new information to establish and contribute to holistic ecological perspectives in talent development and psychosocial development (Papers I and II) and an intervention program from an ecological perspective (Paper III). Moreover, the assumption was that sports psychology is not solely about individuals but is rooted in, and therefore should be constructed in cooperation with, the environment. However, I also acknowledge that this is partly an opportunistic case, since the club was very open to the research project and therefore provided a good opportunity for an in-depth study. Finally, in researching one case, I do not aim for a statistical generalization, but rather for a theoretical or analytical generalization. More specifically, the aim of the present dissertation is to enrich our understanding or theory about successful psychosocial development, characteristics of a successful football environment and ecologically-inspired interventions, thereby hopefully providing new and insightful perspectives on

applied sport psychology and talent development in football.

Procedure

First, contact with Elite Sports Academy in the city of Aarhus and the AGF football club was established in order to start the dissertation. Preliminary acceptance was gained through the manager of sports and coaches, and later from the players. We agreed that the dissertation would have both research and applied purposes and that, for the research purposes, extra time would be devoted to assessment and to data collection throughout the process. We agreed that the identity of the club would be known, whereas the identities of individuals involved would remain anonymous. The assessment consisted of a thorough analysis of strengths and weaknesses in AGF football club. Specifically, I collected and analyzed data across seven months in 2010 and 2011 (see section about data collection for more information). This investigation was a case study based on the holistic ecological approach, and focused on: 1) describing the environment's components and their relations; 2) mapping the organizational culture of the club; and 3) investigating the psychosocial skills that the players developed through being immersed in the particular environment. Overall, the environment was successful and the findings have been described in depth elsewhere (Papers I & II). The few problematic characteristics of the environment served as a basis for the intervention (Paper III). In this sense, the intervention champions a developmental approach that takes behaviors from good to great and strengthens existing psychosocial skills and characteristics in the environment for future within-career transitions.

The research process

The research process was accomplished in a series of steps. Initially, the design phase involved: description of the case, aim of the study, case selection and developing protocol. After completion of each subunit (nested subunits), the data collection protocol, comprising interview and observation guides, was revised to accommodate the findings, and the subunits were analyzed to

identify specific patterns (Thomas, 2011). The research process is illustrated in Figure 4.

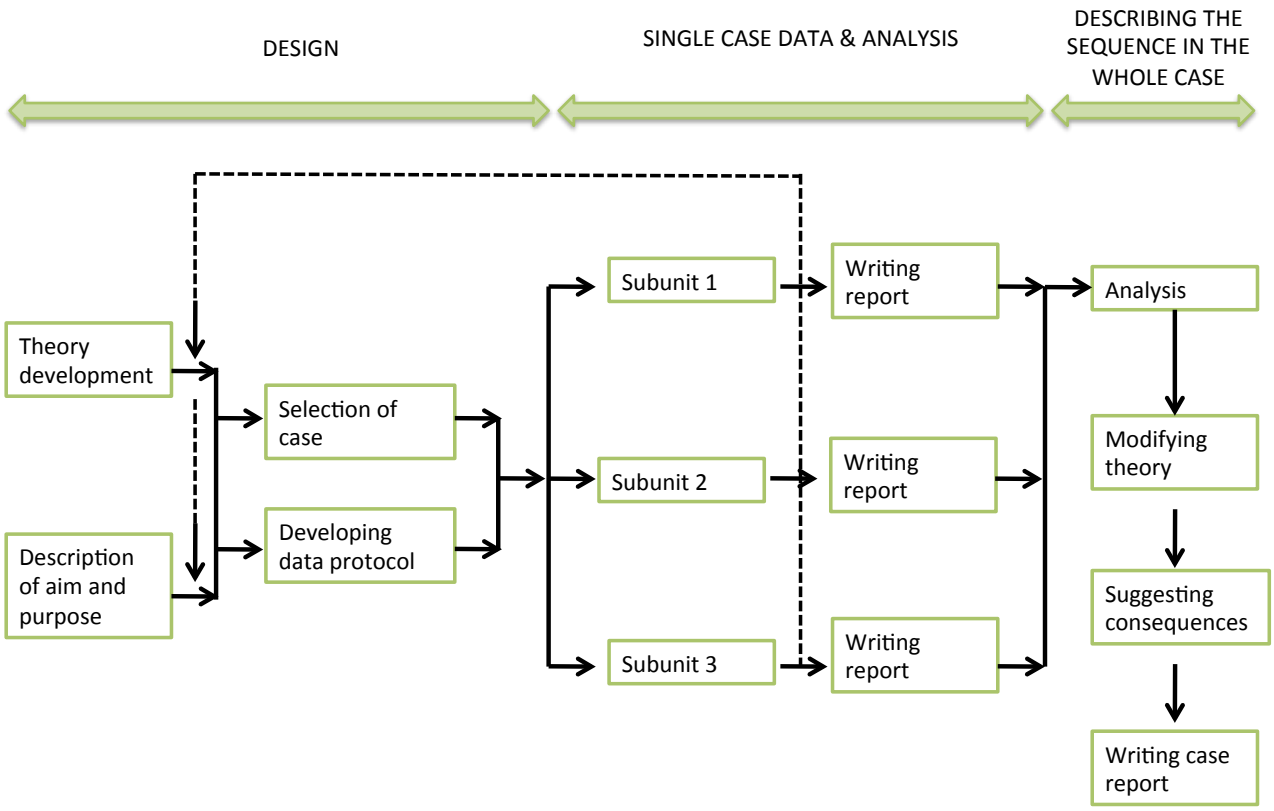

Figure 4. The research process.

Data Collection

Data was collected from multiple perspectives and mainly within the micro-environment, i.e., school, peers, related teams, coaches and players in the club. This dissertation focuses on the under-17 team and related staff in the professional department.

Participant observation. Firstly, in an attempt to achieve contextual sensitivity, participant observation (Spradley, 1980) was used as the primary data collection method in the case study. Participant observation is a good strategy in scientific studies of social relations (Tanggaard, 2006), because it enables *in situ observations* of the social practices under study. Listening to the myths and stories, watching rites, customs and traditions, and seeing buildings, logos and styles of

clothing (cultural artifacts), gives the researcher an impression of how the environment creates and maintains its culture. Also, participant observation allows the researcher to follow the subjects across several contexts. The observations were performed as a "moderate participant" (Spradley 1980, p. 60). I am an educated PE teacher and trained footballer, and these qualifications would enhance the possibility of being a successful moderate participant in the chosen environment. More specifically, day-to-day training was observed, and I acted as an assistant coach and sparring partner for the under-17 coach across the three studies over one and half years. I observed training, matches, coaching staff meetings and social events among the players. Interpretations of actions, relations between the parts of the environment and the interests in the environment were the main foci. During the observations, I took descriptive field notes to capture different perspectives and variations in the information of the participants (Patton, 2002).

Interviews. Secondly, 15 individual interviews were conducted, which lasted between 40 and 90 minutes. All interviewees are connected to the micro-environment and include two managers, three coaches, four youth players, two professional players, three school and sport coordinators and one consultant from the municipality. The interviews were semi-structured (Kvale & Brinkmann, 2009), which allowed the interviewees freedom to discuss issues that were personally important to them. Within the semi-structured format, open-ended questions were used to yield in-depth responses about the interviewees' experiences, perceptions and knowledge about the environment and psychosocial skills. Using the semi-structured approach, I referred to questions listed in an interview guide, but was not dictated by it (Patton, 2002).

Document analysis. Thirdly, archives and documents were used as a substantial category of data in the case study (Ramian, 2007). The documents included were newspaper articles involving talent development in the club, the club's website, training plans, season plans, their calendar, internal information about talent development, match evaluations, match statistics, documents from the municipality involving sport and school, annual reports from the municipality and the club's code

of conduct. Data in the documents were compared to that gleaned in the interviews and observations in order to establish evidence for important features in the environment.

Intervention program. Fourthly, in line with the purpose of the dissertation, a particular intervention program was described including how athletes and coaches have experienced it. Specifically, the intervention program focused on delivering three distinct but interrelated initiatives: (1) a series of workshops targeting the under-17 players, but also inviting players from the professional department and coaches and focusing on developing a range of specified psychosocial skills; (2) ongoing supervision of the main coach with the purpose of helping him support the program and stimulate psychosocial development between workshops; and (3) a number of psychological training sessions on the football pitch designed to facilitate transfer from workshop discussions to actual on-pitch performance. In this context, data is considered to be made up of: 1) the observations, interviews and informal remarks gathered during the intervention with the under-17 players, coaches and professional players; 2) meetings and communication with relevant persons at the club (coaches and managers); 3) focus group interviews with the under-17 coach and players; and 4) participant observations of the training sessions on the pitch that were a part of the intervention.

Data analysis

The interviews were audio recorded and transcribed verbatim. Transcriptions were subsequently sent to the participants for verification. Full anonymity was guaranteed to the participants in each study. The data analysis was based on an abductive strategy (Dubios & Gadde 2002; Chamberlain, 2006) and consisted of two steps using Nvivo 8 coding software. The first step consisted of a deductive categorization of data (Kvale & Brinkmann, 2009, p. 201). The second step was a theoretical reading (Kvale & Brinkmann, 2009, p. 238) of data with the purpose of generating explanatory themes. These two steps of the analysis were systematically combined as described by Dubois and Gadde (2002, p. 554).

In order to describe the complexity and details of the interactions in the environment, the aim of presentation of data "is an in-depth picture of the case using narratives" (Creswell, 2012, p. 191) and a "thick description" of the specific subunits and the case as a whole to achieve credibility (Tracy, 2010). Accordingly, presentation of data in the papers is a combination of individual and focus group interviews, observations (e.g., informal talks, meeting) and analysis of documents, which as a whole should provide an in-depth and thick description of AGF football club.

Ongoing member reflections took place during the individual studies. Unlike a member check, member reflections go "far beyond the goal of ensuring that the researcher got it right… [and] are less a test of research as they are an opportunity for *collaboration* and reflexive *elaboration*" (Tracy, 2010, p. 844). All participants were invited to read the transcripts of their interviews. The coaches and manager of the club received a full, written copy of the researcher's analysis and interpretations, which they discussed with the principal researcher. In this cooperation, learning from the environment's reactions to the portrait gave new insights. Peer validity (Kvale & Brinkmann, 2009) was obtained through collaboration with the co-authors to establish the accuracy of the interpretations. The triangulation of data sources and data collection techniques helped to establish the trustworthiness of the analysis and findings (Patton, 2002).

CHAPTER 5. FINDINGS

This dissertation presents a comprehensive picture of how to apply a holistic, ecological perspective to sport psychology and talent development in a professional football club and discusses some important aspects that can contribute to a deeper understanding of the phenomenon. First and foremost, I will provide a presentation of AGF football club in which the individual studies were completed. As previously mentioned, the under-17 team and coaches comprised the main subject of the dissertation. In the following, I will provide a short description of each paper. The broad methodology and theoretical perspectives of the dissertation serve as a foundation for the three papers and have previously been described. However, I will provide a short description of the aim, theory (specifically related to the individual paper), findings and summarize the conclusions of the three papers. A more thorough description of each paper will be found at the end of the dissertation.

Left photo: the old clubhouse in Aarhus which houses both the youth and professional departments. Right photo: the four values of AGF football club in the under-17 locker room: Passion, commitment, accountability and respect.

Presentation of AGF football club

This dissertation and the three papers are based on empirical data gathered from AGF football club. The club is one of the oldest and most successful Danish football clubs and is situated in the city of Aarhus. Aarhus is the second largest city in Denmark, and it has one of the highest

concentrations of talented and elite athletes in Denmark. The club is part of ESAA (Elite Sport Academy Aarhus) (“Esaa”, 2013), which is an institutional set-up that provides young talented athletes with the opportunity to combine schooling with an elite sports career. ESAA is based on a partnership model with the local elite sport clubs, local educational institutions and the national sport federations. In 2010-2011, ESAA co-operated with 15 different sports and more than 350 athletes, two primary schools, nine secondary schools (gymnasium and vocational) and the University of Aarhus (“Esaa”, 2013). The club consists of two departments: A volunteer, non-elite department for a wide range of football players, and a professional elite department for male youth teams ranging from under-13 to under-19, plus senior teams. The club has fulltime coaches for each youth team. The professional senior team is organized into a section of its own. The professional senior team plays in the Danish Premier League and a reserve team in a separate tournament for professional teams in Denmark. A professional senior team consists of: a fulltime first team coach, assistant coach and relevant experts supporting the team and staff. A team of coaches dictates the strategy for talent development and new perspectives for the youth teams. The old clubhouse shows the stories and traditions of the club. The club is a self-contained part of the largest sports club in Aarhus (Aarhus Gymnastics Association), which was founded in 1880 as a multidisciplinary sports club. Football joined the program in 1902. The club is one of the most successful Danish football clubs, with five Danish championships and nine Cup titles (a record). The professional department of AGF football club was founded in 1978. In 2005, the professional football department joined the newly consolidated Aarhus Elite and expanded the business to other areas (professional handball, basketball, a stadium and office buildings). AGF football club produced between 15-25 male youth national players from 2007-2009 and seven of the 25 professional players are from the youth department of the club.

Paper I

Psychosocial skills in youth soccer academy: A holistic ecological perspective

Aim

The aims of the paper were to uncover the development of psychosocial skills in young football players in relation to their micro, meso and macro-environment, and intended to explore (a) which psychosocial skills are important in a youth football academy and (b) how these psychosocial skills were practiced in the environment.

Theory

The study is based on the theoretical framework of Bronfenbrenner (1979; 2005). Moreover, the focus in this paper is directed towards psychosocial skills as a key determinant in the talent development process (MacNamara et al., 2010a) and asserts that competencies can be divided into internal and external assets. Internal assets represent attributes of the individual, such as commitment to learning, goal setting, emotional control, self-esteem, hard work ethic or interpersonal competence (e.g., communication skills or social skills), whereas external assets are characterized by the quality of the environment shaping the child, including access to positive role models, social support, and positive peer influence (Harwood, 2008).

Findings

The findings show an overall distinction between explicit (being practiced and talked about) and implicit (indirectly practiced and rarely talked about) psychosocial skills across two themes: internal and interpersonal. The current study demonstrates the interweaving of adolescent athletes' psychosocial skills and the talent development environment, and thereby underlines the social construction of psychosocial skills in elite sport.

Internal psychosocial skills. Within the internal category, six low order themes were generated, including self-awareness, goal setting, motivation, self organization, ability to work hard and managing performance and process outcomes.

Most of the psychosocial skills were practiced and talked about in the club, however psychosocial skills such as goal setting and managing performance and process outcomes were only indirectly practiced and talked about. These two psychosocial skills were described by the professional players as important for making the transition to professional level. Even if the participants constantly report the importance of goal setting skills, we did not observe actual teaching or practicing of goal setting during training or in other areas of practice. This is an example of how the environment is able to *talk* about goal setting as a psychosocial skill without *teaching or practicing* it explicitly. In this way, the explicit psychosocial skill of goal setting seems to function as an guideline – something to talk about because it underpins the self -understanding in the club, but the players are mostly left alone with "setting their own goal" and the actual goal setting skill thereby becomes an implicit psychosocial skill.

In general, the professional players, club manager and professional coach related that it is crucial to be "able to handle adversity" and to "learn from mistakes and deal with pressure" in order to make the transition to professional football. From our observations, there was no direct teaching of these aspects of the psychosocial skill "managing performance and process outcomes", even though, from the professional players' experience, this seems to be an essential psychosocial skill, for making the transition to professional football. Instead, our observations of the way in which AGF football club practiced "managing performance and process outcomes" point to only one strategy: players learn to forget the mistakes and keep up the hard work.

Interpersonal psychosocial skills. Within the interpersonal category, four low order themes were generated including respect, utilizing team skills, appreciating family and teachers as resources, and general social skills.

Being a newcomer in the club, the author was introduced to the history of the club and its

legends as well as the almost family-like atmosphere in the club. The early observations and the subsequent dialogues with the participants revealed an underlying value in the club that related to the importance of showing respect for coaches, teammates, older athletes, opponents, referee, officials, personnel and spectators. To show respect for AGF football club and those engaged in the club seemed to be a pivotal virtue to learn as a member of AGF football club, and this included the young players engaged in talent development. The youth coaches, and especially the youth players, emphasized the importance of their family and their support networks to be able to balance sport and school. However, observations did not show the high level of parental involvement, that is generally found in Danish leisure sport. A noteworthy feature in this environment is the coordination and cooperation between sport and school, including support from teachers at the school.

It is clear from data that "knowledge of individual communication preferences" and "listening skills", as communicative aspects of general social skills, were practiced and talked about before, during and after practice sessions, and games and were also part of the regular discourse in the environment. However, observations established that important aspects, such as "being able to handle social life and school", "socializing skills" and "utilizing coaches and experts" were a minor part of the discourse and rarely mentioned by anyone other than the youth players themselves.

Conclusion

This study shows that internal and interpersonal psychosocial skills are equally important for the football players in the case study. The results showed a differentiation between explicit and implicit psychosocial skills, which were related to the process (the regular activities and practice in the environment) and characteristics of the environment. Research indicates that it is important that staff in the talent development environments know which psychosocial skills are important in academies and whether they are explicitly or implicitly taught (Martindale & Mortimer, 2011; Henriksen et al., 2010). Schein (1990) pointed out that a culture – in this instance, the academy and

football environment in AGF – consists of three layers of visibility. In the present study, the explicit and practiced psychosocial skills were observable as artifacts and espoused values (norms and ideologies) and were communicated on a frequent basis (Schein, 1990). The implicit and indirectly practiced psychosocial skills are "taken-for granted, underlying, and usually unconscious assumptions" (Schein, 1990, p. 112) which comprise the core of the culture.

In the talent development process, they way in which psychosocial skills are incorporated into the culture is important and part of the shared articulated discourse in the environment. Taking into account the professional players' experience, these psychosocial skills – or more precisely: the lack of these skills – represent the almost unbridgeable "gap" (or glass ceiling) between academy level (youth football) and elite level (professional football), which is the most important transition in a young player's career (MacNamara et al., 2010a; MacNamara, 2011; Van Yperen, 2009). However, very few interpersonal psychosocial skills are explicit and practiced in the environment, whereas more internal psychosocial skills are practiced, incorporated into the culture and part of the shared articulated discourse in the environment. This result may inspire practitioners to work explicitly with psychosocial skills in relation to the sporting environment in which they are developed.

Although this case study is unique, i.e., based on Danish culture and a specific sporting environment, the aim to explore and identify explicit and implicit psychosocial skills may provide inspiration for those involved in talent development environments across cultures and especially in teaching adolescents to cope with transitions.

Paper II

Successful talent development: The characteristics of the environment

Aim

The objectives of the study were to: (a) provide a holistic description of a successful athletic

talent development environment in a team sport (i.e., football), namely AGF football club in Denmark; (b) examine factors influencing the environment's success in developing future elite players (i.e., professional players); and (c) analyze if and in what ways the eight features of a successful ATDE are present in the environment.

Theory

The theoretical point of departure is the holistic ecological approach, represented by two working models developed by Henriksen, Stambulova, and Roessler (2010a; 2010b; 2011). The first model, the athletic talent development environment (ATDE) working model, is based on Bronfenbrenner's (1979; 2005) bio-ecological model of human development and is a framework for describing a particular athletic environment and for clarifying the roles and functions of the different components and relations within the environment. The second model, the environment success factors (ESF) working model, is based on the organizational psychology of Edgar Schein (1990) and centers on the emergence of the organizational culture in the environment.

Findings

The staff played a vital role in the exchange of knowledge in the environment. The daily praxis of the staff was founded on informal discourse, but once a week there was a formal coach meeting including the talent manager and sport manager, during which relevant knowledge regarding status of talent development, performance and results was shared and discussed. A familiar atmosphere and holistic approach permeated and dictated the way the staff worked with the players. The players saw the coaches every day for informal talks and the office was literally always open. The coaches shared knowledge on a regular basis regarding recruitment and try-outs of new players from local clubs or grassroots clubs (clubs that are in cooperation with the club), injuries, development plans, lack of development, and poor or good performances. Despite the strategy for, and ambition of, the players to go on to professional level, there were no actual relationships with

the professional players. The professional team members were distal role models for the players, in the sense that the players "saw" them every day but exchanged no knowledge of development with members of the professional team.

The club highlighted a learning environment in which the players strived to develop, worked hard each day and trained with players below, at the same level and above their ability each week. The talent manager related that the players are dependent on each other and their teammates are essential for learning and keeping a high level of quality during training sessions.

The environment was inspired by the English FA and highlighted values such as: Passionate players living and playing with passion and being proud of and believing in what they do; committed players demonstrating joy and courage with the "right" attitude, i.e., demonstrating involvement, concentration, focus and readiness in all tasks; accountable players vouching for their own actions and agreeing to act in conformity with the club and team standards; respectful players demonstrating tolerance, acceptance and understanding of differences, regardless of status, attributes and skills. The values were part of the discourse in the club and players and coaches regularly talked about the values and how to respect them on and off the pitch.

The analysis revealed that the club and players were characterized by a culture consisting of four interconnected basic assumptions. The first assumption and fundamental governing principle was a strong family feeling associated with openness, cooperation, humbleness and professionalism by the members of the environment and the core of the group's cultural paradigm. The second assumption was reflected in the approach to long-term talent development. The path to being a professional is simply to work hard and there was a deeply rooted as well as explicit discourse and understanding in the environment that was narrated over and over again. If the players are willing to work very hard, they will probably reach the professional level. Closely linked to this was the third assumption: Focus on player education and development. This assumption was related to the overall goal of developing players for the professional team. The fourth and last assumption described the environment as a whole: A holistic approach in talent development.

The success of the club were related to 1) how many of their own players were part of the professional team, 2) how many players were part of youth national teams and 3) a successful combination of school and football.

Conclusion

This study shows that a focus on the athletes' long-term education and development is important rather than their early success. This seems to corroborate the conclusions of the developmental model of sport participation (Côté, Baker, & Abernethy, 2007) that elite performance may better be fostered by later specialization and by not exclusively focusing on early success. Moreover, the environment was based on cooperation, openness, and sharing knowledge. The environment furthermore developed players that recognize the need for a holistic lifestyle and develop psychosocial skills and competencies for life rather than just sport-specific skills. In line with these results, Martindale et al. (2005) highlight similar characteristics of successful environments including a clarity and consistency of philosophy, objectives, and methods, which includes that aims and methods must be long-term and coherent.

However, one pivotal problem is the lack of proximal role models and communication, which is non-existent in the transition from youth to professional in AGF football club and maybe in football in general. In the present study, the transition could be a cultural shock and therefore represent a challenge and an unfortunate basic assumption associated with the transition in AGF football club. A consequence could be that the family feeling between player and club in itself makes it feasible for the youth to make a smooth transition to the professional level. However, this might not be enough and coaches have a particular responsibility for helping athletes with their transition. Moreover, this study provided support for recent research findings in the area of talent development in sport as well as for the applicability of the holistic ecological approach in studying and working in and with the environment in football. The present study of AGF football club complements previous studies of individual sports, and provides important insights into the way in

which holistic ecological analyses of talent development in a team sport may be carried out.

Paper III

Preparing footballers for the next step: An intervention program from an ecological perspective

Aim

The aim of the present paper is to a) provide sport psychology practitioners and applied researchers with a detailed description of an intervention program that was guided by the principles derived from the holistic ecological approach and b) evaluate the participants' experiences of the intervention program.

Intervention programs from an ecological perspective

A practitioner who adopts an ecological perspective will be guided by a number of principles in his/her work. Based on the holistic ecological approach, its working models and previous case studies of successful environments (Henriksen et al., 2010a; Henriksen et al., 2010b; Henriksen et al., 2011), the following six principles are put forward as fundamental governing principles to guide an intervention inspired by the holistic ecological perspective.

Firstly, the findings highlight that the practitioner should acknowledge that the athlete is embedded in an environment. Secondly, the intervention should be built on a thorough assessment of the environment from a holistic perspective and in the present study we assessed the strengths and weaknesses in the club. Thirdly, the practitioner should not only work with the individual athletes but also aim to optimize the entire environment around the athlete or team. Fourthly, an intervention should take into consideration that an environment is always situated in a larger cultural setting, e.g., a national culture and a sport-specific culture, and plan accordingly. The present case is embedded in Danish football culture, which should be taken into consideration

before the intervention program starts. Fifthly and sixthly, the intervention should aim to create and maintain a strong and coherent organizational culture and treat the athletes as whole human beings by supporting their development of a holistic package of psychosocial skills that will be of use for the athletes, not only in their sport, but indeed in their other life-spheres as well.

These principles should inform the intervention throughout the process, from the initial assessment and the formulation of targets to the delivery and evaluation. At the same time, it is important to note that the principles will be expressed differently in specific interventions.

Findings

The overall structure of the program is outlined in three interconnected steps: 1) Assessment, 2) feedback and objectives, 3) program delivery and evaluation of the program. Parts of the program have been presented elsewhere (Papers I and II), and this paper describes the delivery of workshops, the supervision of the coach, on pitch training and evaluation of the program.

The participants emphasized that much is to be gained from the group workshops. The workshops in which under-17 players listen to professional players' experiences created room for reflection and helped the young players build the capacity to overcome the many obstacles encountered during their sporting career. One of the findings of the program was that delivering sport psychology from an ecological perspective, particularly creating stronger relations between different persons in the micro-environment, required a substantial time investment. Particularly, the author and under-17 coach spent a lot of time planning, preparing for and evaluating training, as the coach was the key person in the club and the program. One of our findings was that the development of close relations between the author, under-17 coach and professional department was a time-consuming task because the coach had to be committed for the program from the start for it to be successful.

A key element of the program was to implement sport psychology as a part of the

organizational culture of the club. The ecological perspective further dictated that the participants, as well as those in the surrounding micro-environment, needed to know about sport psychology and how it is employed in the club. Therefore, we spent a lot of time "lobbying" for the program and making sure the managers, coaches from other teams and the health department were supportive of the program.

Since one of the aims of the intervention program was to create a connection between the youth and professional departments, thus creating proximal role models for the under-17 players, several professional players and a coach from the professional department visited a number of workshops. The workshops were, in this case, dictated by a personal disclosure, mutual-sharing approach, as the purpose was to make the under-17 players reflect and listen to experiences and stories related by the professional players, coach and each other (Windsor, Baker & McCarthy, 2011). The under-17 players received a wide range of different perspectives on how to handle adversity during competition, training and in life in general.

All in all, the workshops created room for reflection for the under-17 players and created a general awareness of demands and development of psychosocial skills for coping with future within-career transitions in AGF football club. During the program, we handed out to each player a personal logbook for reflections during the program. On reading these logbooks, we discovered that each player individually had become more aware of demands and had developed a deeper understanding of the different elements in, and their importance for, the transition to professional level.

Conclusion

The holistic ecological approach opens new avenues and inspires coaches and practitioners to work with the individual player's athletic development, as well as be sensitive to, analyze and work, to create an environment that is supportive of the athletes' development. The first step of the intervention (assessment) revealed that the club in many ways already had a strong organizational

culture in which the espoused values corresponded with enacted values. The club and players displayed a strong family feeling and the club provided a holistic focus on talent development. However, this culture also included a lack of attention given to the development of psychosocial skills. In many ways, coaches were not aware of this issue and no priority was given to psychological training. Therefore, it became an explicit aim of the intervention not only to develop the psychosocial skills of the players but indeed to create a culture for treating such development as a natural part of everyday training. In order to develop such a culture we integrated several agents in the environment and worked with psychosocial development on and off the pitch, reinforced by coach supervision.

The findings from this study provide perspectives on how to deliver career assistance programs in elite sport. The transition from talented youth level to professional level is difficult and complex (Stambulova, 2009), and a key factor for successful interventions is the player's resources (experiences and psychological skills) (Alfermann & Stambulova, 2007; Stambulova, 2009). Therefore, most career assistance programs aim to build such resources in the athletes. However, most programs are also based on the general idea of a practitioner (sport psychologist or other) teaching the athletes skills and preparing them for the adversity to come (see Petitpas & Champagne, 2007). The present study demonstrates that a career assistance program could involve the athletes' environment to their advantage. The practitioner delivering career assistance programs could be aware of integrating multiple informants in the talent development process (e.g., former athletes, current elite-level athletes, elite-level coaches). This multiple-information approach for teaching psychosocial skills serves as a strong foundation for clarifying career transition demands for youth athletes.

CHAPTER 6. DISCUSSION

In this chapter I will discuss the findings in relation to the aim of the dissertation, the chosen theoretical perspectives, and the wider applied implications. The findings of each paper and the introduction provide insight into specific perspectives or mechanisms that are crucial for sport psychology services from an ecological perspective. Firstly, the introduction reveals fundamental details about various social, cultural (sport-specific and national) and financial preconditions and constraints in Danish football, which constitute important knowledge for the practitioner applying sport psychology services in a professional football club. Secondly, having previously addressed the approach on the basis the dominating theories, the theory and method together underscore a belief system and epistemological foundation based on context and complexity. Thirdly, psychosocial development in the academy directs the attention towards how psychosocial skills are practiced and talked about (explicit) or not practiced but talked about (implicit), which has consequences for coping with future within-career transitions in the club. Fourthly, the characteristics of the environment and organizational culture in the club uncover key assumptions (e.g., holistic approach, strong family feeling) that inform the practitioner of the mechanisms in the club and are crucial for the intervention strategy. Finally, the intervention program provides insight, from an ecological perspective, into principles for applying sport psychology in sport organizations. Together, these perspectives provide specific details that should inform and guide the practice of the practitioner in his/her work with professional footballers in a Danish professional club. In the following, I will convey these perspectives and sum up the chapter by describing how culture informs the reflections of the practitioner, which subsequently informs the assessment and how the intervention strategy is delivered (and how sport psychology is applied) in a specific sporting environment. At the end of the chapter, I will describe an ecological model for sport psychology delivery and six governing principles that a practitioner who adopts an ecological perspective will be guided by in his/her work.

Implicit and explicit psychosocial skills – a new perspective on within-career transitions

This dissertation demonstrates the interweaving of adolescent footballers' psychosocial skills and the talent development environment, and thereby underlines the social construction of psychosocial skills in professional football. The findings show that important explicit psychosocial skills include motivation, self-awareness and the ability to work hard. However, factors that are even more important for the young football players dealing with the transition to professional football seem to be implicit psychosocial skills, such as managing performance and process outcomes, setting goals (internal) and the ability to utilize team skills and general social skills (interpersonal). Despite the fact that the environment expects the young players to display these skills, they are only indirectly addressed. A key issue for talent development arises when values take on the character of assumptions; they disappear as explicit and practiced learning goals and transform into implicit expectations. This result highlights the fact that implicit psychosocial skills are gradually less and less practiced in AGF football club, even though they are pivotal to the application of sport psychology in the given context. These perspectives show that the cultural characteristics of the club can present a crucial problem for the young football players in their endeavor to learn the psychosocial skills necessary for a successful transition to professional level. These characteristics should inform the practitioner of how he/she should act when starting to work in the environment. In order to use the knowledge of psychosocial skills in the club, the practitioner should make sure to make a thorough assessment to be able to reveal these characteristics. However, practitioners who rely on MST would probably not be aware of the problem and could implement skills training without assessing the characteristics of the culture. In that case, the practitioner would be missing important information that provides specific details of how to tailor and target sport psychology services in the club and for the specific age-group.

These findings contribute to existing literature as well as provide new perspectives for within-career transitions in talent development environments. Firstly, the dissertation supports the distinction between psychological characteristics of excellence (PCE) and psychological

characteristics of developing excellence (PCDE) (MacNamara et al., 2010a; 2010b). In line with the findings, MacNamara and colleagues (2010a; 2010b) furthermore introduce a list of PCDEs (including commitment, realistic performance evaluations, planning and organization skills, and self-awareness), and argue that the delivery of sport psychology services should acknowledge that the skills needed to reach the elite level are different from the skills needed to succeed at elite level. Holt and colleagues (2004; 2006) present similar notions in their study of young talented football players on the verge of making a breakthrough into the professional ranks, and of sub-elite football players in a professional talent development system on the verge of *not* making it into the professional ranks. Their studies revealed that a specific set of psychological characteristics are associated with making a successful transition into elite football; a set of skills that do not correspond with the skills needed to succeed at the elite level.

However, this dissertation additionally transcends the research by Holt and colleagues (2004; 2006) and MacNamara and colleagues (2010a; 2010b). This dissertation revealed four different combinations of psychosocial skills: 1) internal implicit skills, 2) internal explicit skills, 3) interpersonal implicit skills and 4) interpersonal explicit skills. Categories one and three are of particular importance due to the implicit nature and the problems associated with psychosocial skills being "caught" instead of "taught" (Gould & Carson, 2008) at either youth or professional level. Furthermore, the distinction between psychosocial skills needed for making it at professional level and succeed at professional level provides new perspectives by emphasizing the distinction between implicit and explicit psychosocial skills. This finding raises the question of whether the "right" skills for the transition to professional level are really practiced or are merely talked about in the environment. Therefore, these findings once again underscore the fact that the practitioner must make a thorough assessment in order to reveal these different combinations of psychosocial skills in the specific environment. Coaches and practitioners in the specific talent development environment would have to identify which skills need to be made explicit (practiced and talked about) in the preparation of young footballers for the within-career transition for professional level. Whether

psychosocial skills are explicit or implicit is crucial in terms of the amount and quality of the support that young players receive from the environment and strategies employed for coping in transitions to senior level (Alfermann & Stambulova, 2007).

The present findings furthermore highlight that practitioners should provide the young players with a holistic skills package containing a variety of psychosocial skills to enable them to handle challenges in the transition from junior to senior level; prioritize and plan their daily life; balance sport, school, social life and recovery; and be able to use the professional players as a resource. However, the players highlighted that the under-17 coach, practitioner and professional players and coach each had their role to play in clarifying the demands and expectation in within-career transitions. The findings are in line with Martindale and Mortimer (2011), who argue, "It is crucial that sports have a very clear and holistic developmental 'curriculum'. This would cover technical, tactical, physical and mental development as a minimum, whereby it would be possible to identify and develop progression for any youngster of any ability within a programme" (p. 67). This extends to the notion that the practitioner, coach and environment should take an interest in the young player as a person, not only as an athlete, and provide services that helps the young player to manage the multitude of existential challenges involved in being an athlete, a student, a son or daughter, a boyfriend or girlfriend, and so on (Nesti, 2004).

The path to professional – factors underpinning athletic career development

Besides the social construction of psychosocial skills in professional football, the findings contribute to the literature on career transitions of athletes, where players progress from the developmental to the mastery phase (Salmela, 1994) or from the specializing to the investment years (Côté et al., 2007). As emphasized by these and other developmental models of athletic careers (summarized in Alfermann & Stambulova, 2007), the transition from one stage to the next can be facilitated or hindered by internal and external (environmental) factors. This dissertation is particularly concerned with the external factors, which may become supportive in interaction with

the athletes' prerequisites. Although each successful ATDE is unique, the analysis of the environmental conditions of AGF football club compared to previous studies shows that the environments share a number of factors contributing to their success. There is, firstly, a focus on the athletes' long-term education and development rather than their early success. This seems to corroborate the conclusions of the developmental model of sport participation (Côté et al., 2007) that elite performance may better be fostered by later specialization and by not exclusively focusing on early success. A second important factor of an ATDE is a strong and coherent organizational culture, where there was correspondence between visible tokens of the culture, such as values and mission statements and what people "said they did" and what they "actually did". Moreover, a governing principle in the culture was a strong family feeling. This family feeling is reflected in very strong relationships between the members of the team, which are regarded as highly important by the football players. Bruner, Munroe-Chandler, and Spink (2007) found similar findings in a qualitative study with 17-year-old elite male junior ice hockey players in Canada who had just made the transition into elite sport.

However, in AGF football club there were no proximal role models, a condition that in previous literature is described as pivotal in other successful ATDEs (e.g., Henriksen et al., 2010a). The youth players saw the professional players each day but there was no exchange of knowledge and experiences between them, and the professional players functioned as distal role models and in that sense the role models in AGF football club seem more superficial than described in the literature by Henriksen and colleagues (2010). The lack of proximal role models in this football club represents an inherent problem for the club, but it seems that this "gap" seems evident in football across Europe due to organizational structures (Relvas et al., 2010). In line with systems theory, the lack of role models is similar to what Philips et al. (2010) refer to as constraints in the environment. In order to provide services for young players to make the transition to professional level, there is a need to be aware of the constraints involved. Basically, the lack of interaction and communication between youth and professional departments (e.g., distal role models) represents a

lack of clarity about the demands involved in transition. Philips et al. (2010) argue that expertise is limited or shaped by interacting constraints at many system levels. The concept of constraints (boundaries that constrain the interactions of system components) could be classified into organismic, task and environmental constraints; the latter defined as social and family support. Constraints in the expertise acquisition context can be conceived of as the numerous variables that form each individual expert's developmental trajectory, and it is important to identify the range of constraints on the acquisition of expertise (Philips, Keith, Renshaw, & Portus, 2010). In this perspective, the organization in AGF football club (and most European clubs, see Relvas et al., 2010) represents an environmental constraint that is not solely represented by social and family support, or the lack of it. However, this dissertation describes an additional variation of environmental constraints, or more specifically, cultural constraints. In this sense, different cultural constraints, respectively the football culture (i.e., sport-specific culture) or organizational culture or national culture, affects the individual players' developmental trajectory and the acquisition of expertise. In this case, the lack of interaction between the components (players from youth and professional departments) at two different organizational levels (youth and professional level) is a cultural constraint at organizational level that potentially could inhibit the within-career transition to professional level in AGF football club. These perspectives provide key factors that need to be addressed in the application of sport psychology in professional football. They inform the practitioner about the challenges of creating services, bridging youth and professional departments, represented by two different organizational structures. Due to this lack of connectedness, the practitioner is required to spend a lot of time 'lobbying' for sport psychology and making sure the managers, coaches from other teams and the health department are aware of and support sport psychology services in professional football.

Career assistance programs – providing multiple perspectives on transition demands

In order to make it to the professional level, it is important that the environment explicitly

supports the youth player to successfully cope with future within-career transitions. One of the problems described was the lack of clarity of transition demands. The experiences of the participants in the intervention program reveal that players, as well as the coach, experienced the collaborative effect and exchange of knowledge between the professional players and coach as beneficial for their experience of within-career transition demands and expectations. The under-17 players were able to straightforwardly talk about how the narratives of the professional players affected them. It is important that the under-17 players listen to the experiences and narratives of the professional players' conception of daily life (demands and expectations in the future transitions), something that the author or the under-17 coach was not able to provide in similar ways. The importance of listening to each other's stories once again points towards the fact that culture is something we create and carry on in relationships that make sense for us (Bronfenbrenner, 2005; Kayser Nielsen, 1997). In general, the key issue is that coaches and practitioners do not have the same experiences as professional players and therefore they talk about and teach psychosocial skills and experiences of transition in a different way and with a different purpose. However, when combined, the different positions (of the professional players and coach, under-17 coach and author) serve as a coordinated organizational effort in teaching psychosocial skills and clarifying within-career transition demands and expectations for youth athletes. Such knowledge lends some new perspectives to career assistance programs and the practice and content of these programs. As a focal point, practitioners need to provide multiple sources of information (different roles in the club or program) to teach about future (within-career) demands and expectations and therein make the individual player reflect upon his strategies, support, self and the situation – reflections that are crucial for successful coping in transitions (Alfermann & Stambulova, 2007). The new perspective that stems from the findings is that reflection and learning of the youth player are important factors in clarifying transition demands. Furthermore, to be able to target each player's individual learning path, the program needs to integrate multiple sources of information. The experience and needs of youth players are different from elite players (Holland et al., 2010) and the experience and need for

clarifying the demands of within-career transitions is also individual to players. In this sense, these perspectives provide some insight into how the practitioner should consider the content of sport psychology services aimed at young players in this age group, who have specific individual needs for clarification of transition demands. These perspectives are supported by a Dutch study with elite youth athletes. Jonker and colleagues (2012) highlight that reflection is considered a key factor in expert learning. This refers to the extent to which individuals are able to appraise what they have learned and to integrate these experiences into future actions. The results showed that athletes who made the transition from junior national to senior international level had higher reflection scores than their peers who did not reach international status and had similar scores to those who were internationals as juniors. These results emphasize the value of reflection in elite youth athletes in terms of attainment of senior international status later in their development (Jonker, Elferink-Gemser, de Roos & Visscher, 2012).

Sport psychology services – applying a long-term holistic perspective

The findings of the present dissertation clearly support much contemporary research on applied sport psychology with competitive youth athletes. The purpose of the present dissertation was not to test or revise notions of applied sport psychology and therefore the aim adopted was an open approach on how to apply sport psychology at academy level in professional football. Fifer et al. (2008) describe several important steps or guidelines for the practitioner working with athletes. For example, keys to gaining entry are: hard work, knowledge of applied sport psychology, being creative and innovative in applications, willingness to continue to learn, and being genuine. These perspectives are not addressed in this dissertation but are important aspects of applied work. The findings support the idea of a professional philosophy as a driving force in the consultation and the recommendation that such a philosophy should include a focus on the athlete as a whole person, on the player's lifestyle, the environment and the culture. Furthermore, they highlight the importance and awareness of the environment in sport psychology services: "The context in which you will be

working by assessing the subculture or the sporting situation, learn the politics of the organization, determine the team and staff dynamics, understand the amount of support you will have, determine who the leaders and decision makers are, and finally, identify the gate keepers" (Fifer et al., 2008 p. 375). Despite the important contributions by Fifer et al. (2008) to the field of applied sport psychology, they mention subculture but do not address which kind of culture. The present findings therefore provide new perspectives aimed at the reflective practitioner and how he or she is informed by the sport-specific culture, organizational culture as well as national culture. This holistic ecological approach argued for in the dissertation supports the strategy of holistic consulting, which is focused on: (a) managing the psychological effects on the athlete's performance from non-sport domains; (b) developing the core individual beyond their athletic persona; and (c) recognizing the dynamic relationship between an athlete's thoughts, feelings, physiology, and behavior (Friesen & Orlick, 2010). However, developing athletes beyond their athletic persona is a lengthy process (Price & Chahal, 2006) and managers and coaches in football often suffer from taking a short-term perspective. As an example, the current employment expectancy of team managers/head coaches in English league football stands at a record low of 1.4 years (Cruickshank & Collins, 2012). With the ever-increasing professionalization in talent development (Heinilä, 1982), it is important to state a clear warning against adopting this trend from the professional ranks. From the perspective of sport psychology services to youth players, a long-term focus and a stable environment is a prerequisite for success.

Developing a "technology" for the club – going beyond mental skills training

The findings of this dissertation bear witness to the importance of giving special consideration to the importance of culture in the delivery of sport psychology services in professional football. The holistic ecological approach taken in this dissertation presents a clear plea, not only to adhere to the concepts of working with individual athletes or focusing solely on the player or the team, but also to understand – and if necessary to optimize – the entire environment

around the player and team. Furthermore, the dissertation demonstrates the interweaving of psychosocial skills and practices in the talent development environment, and thereby underlines the social construction of psychosocial skills in elite sport. The dissertation provides the practitioner (and other agents in the environment) with concepts of how to be sensitive to and analyze weaknesses and strengths of what makes the environment successful as a whole. The ecological approach transcends MST as instruments for development and performance enhancement in clubs. In line with this, researchers have pointed out that, with the acceptance and implementation of practitioners using MST in applied settings arises the fact "that many theories from basic research are not practical enough to solve the actual problems of coaches and athletes" (Kellmann & Beckmann, 2003, p. 14). Kellmann and Beckmann (2003) additionally demonstrated that, in order to create solutions on a complex level, practitioners need a "technology" that is adequate for the complexity that the practitioners need to solve: "When solving practical problems, a technology needs to be developed that creates solution systems adequate for the given problem" (p. 14). In that sense, linear methods (e.g., surveys or questionnaires) or instruments (e.g., MST focused on self-talk or arousal) would not be sufficient or grasp the complexity and real life experiences in the environment. Nor would they support the notion that the intervention (Paper III) was developed in the environment for the environment. Therefore, working in and with the environments entails collecting data from different sources during implementation of the program and additionally working in harmony with the everyday life in the club. From these perspectives, it is pivotal that sport psychology services and programs integrate the notion of complexity of the different layers in the talent development process, ranging from national culture to team culture. Furthermore, the dissertation draws attention to how a specific sport psychological intervention is linked to the cultural context in which the intervention takes place. This implies that the practitioner must have experience with, and awareness of, the different agendas, roles, levels in the club, and must integrate aspects of the national culture, football culture, club culture and team culture in programs. Consequently, the add-on MST toolkit used by novice practitioners would not constitute a

technology but an instrument too simple to apply to a complex problem. As Luhmann (2000) argues, it requires complexity to handle complexity. Trying to work with MST and using simple tools for the individual player in a complex setting/system – i.e., trying to work with the environment using a simple instrument or skill – would not create solutions but rather confusion or frustration for the players and coaches involved.

However, as described in Chapter 1, there are barriers towards applying sport psychology in football, whether it is MST or the holistic ecological approach. The sport psychology trade is still viewed upon with skepticism and problems arise when practitioners integrate with the team (Johnson et al., 2011). These examples demonstrate that, despite my task to work with sport psychology in, and with, the environment, thereby creating a closer connection between club and practitioner, the system (or football culture) works against applied sport psychology from within. It seems that clubs do not incorporate sports psychology because they think it is unwieldy and inadequate (Johnson et al., 2011; Dosil, 2006), and in this de-selection clubs avoid reflecting upon how sport psychological interventions can contribute to talent development. The football system chooses methods of training and ways of communication based on previous experiences or "traditions" and exclude sport psychology, which it does not view as being a part of itself. Overcoming this obstacle once again points us towards culture, in this case football culture. Despite their interest in the idea, most Danish clubs lack the initiative and ability to implement structured long-term programs for their youth as well as their professional departments, a fact that is also evident in other European countries (Nesti, 2010; Johnson et al., 2011; Dosil, 2006). Nonetheless, being aware of the complexity and employing a technology instead of simple tools could be a solution to break down the barriers concerning psychology in professional football.

Embedded in culture – an ecological framework for applied sport psychology delivery

In the following, I will present the model for ecological sport psychology delivery (ESPD) model that describes the different systems and how these individually inform or guide the

assessment and intervention strategy (or how sport psychology is applied) in a sport organization (see Figure 5). As illustrated in Chapter 1, researchers and practitioners have highlighted that the reflections (often based on dominating theories and research trends) a practitioner brings to the situation influence his/her assessment and thereby the intervention (Henriksen et al., 2011; Jarvis, 1999; Lane & Corrie, 2006). From the researcher-practitioner model (Jarvis, 1999; Lane & Corrie, 2006), I adopted an approach of viewing sport psychology services as informed or guided by several systems and created a framework based on the holistic ecological approach and the notions of systems theory.

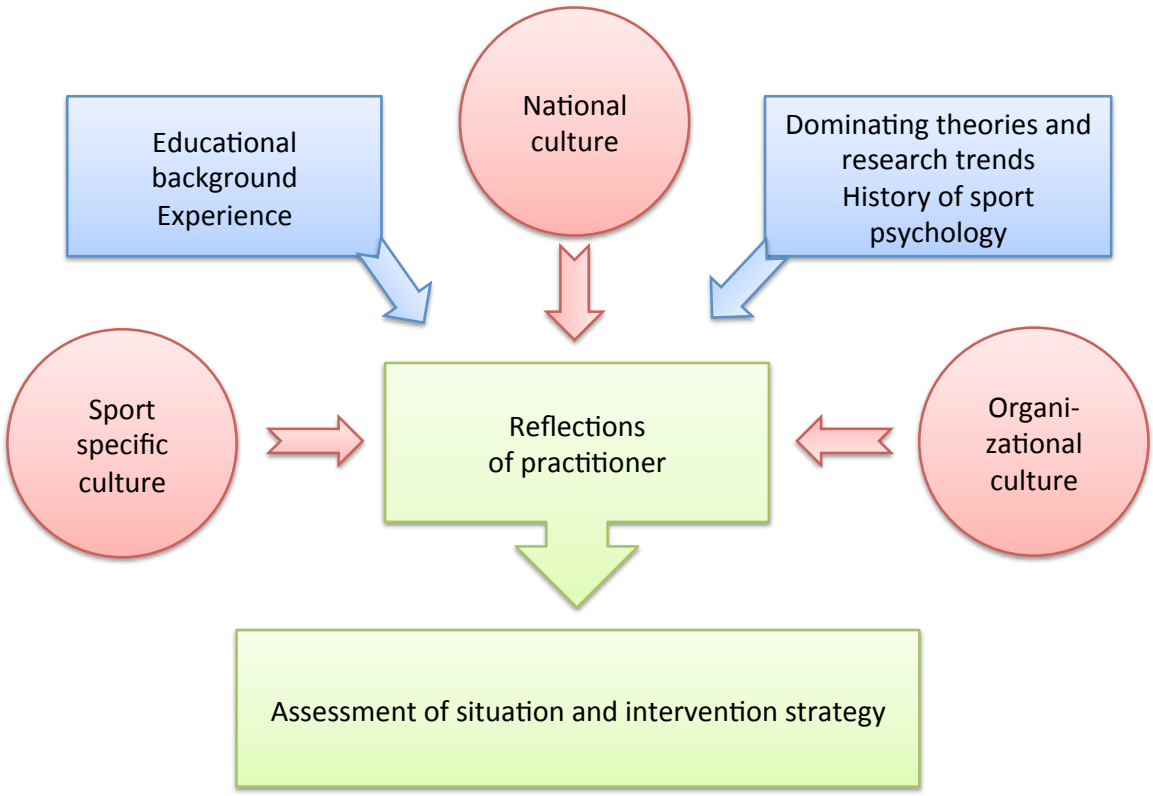

Figure 5. Ecological sport psychology delivery (ESPD) model.

At the top of the model are depicted different systems that inform the reflections of the practitioner. The red circles represent overall macro systems that inform the practitioner and are founded on the results and notions previously presented in this dissertation. The need for the

practitioner to be aware of the specific sport culture (in this case football) informs the reflections and subsequently the assessment and intervention strategy of the practitioner. An example could be that the practitioner in professional football needs to be aware of the football culture and the issue of skepticism towards integration of sport psychology and that the organizational structures of football in most cases is divided into youth and professional departments. Subsequently, and taking into consideration the definition of culture in this framework (see Chapter 1), the practitioner is both a bearer and creator of culture (Kayser-Nielsen, 1997) and highly relevant for sport psychology services.

The blue boxes represent the background of the practitioner. The practitioner has a certain educational background (e.g., psychology or sport science and specific philosophical underpinnings) and experience (from novice to expert) which informs the reflections of the practitioner. Moreover, the dominating theories and research trends, as well as the history of sport psychology in the specific country guide the reflections of the practitioner and subsequently the assessment and intervention strategy. Overall, the model depicts how several different systems inform the reflections of the practitioner and thereby the need for reflexive practitioners who are aware of how each system informs the practitioner and how this information (from each system) is relevant for assessment of the situation and the intervention strategy in the specific context.

At the center of the model are the reflections of the practitioner. In the model, reflection is key to how sport psychology is applied. The practitioner needs to be aware of how his/her reflections are informed by different systems, how these influences affect assessment and intervention and if it should be different in regard to the specific context. A reflection could be that the experienced practitioner working in a football club is aware that simple solutions (e.g., MST) are not necessarily adequate to solve imminent complex problems in such a context. However, there is a need to address more complex issues, such as organizational culture and football culture before deciding upon which tools (e.g., imagery, self-talk or arousal) to use in the specific situation. Therefore, the practitioner needs to establish a foundation for self-description and awareness in

order to change the intervention strategy if needed (Luhmann, 2000). Integrating these notions would mean that the reflexive practitioner would start by addressing *why* (background and culture) before the intervention instead of *what* (mental skills or tools) and *how* (individual or team sessions). Working from an ecological perspective therefore entails gaining insight into the values, assumptions, background and culture ('why') of the specific context and one's own pre-conceptions before being able to work with the 'what' and 'how' with the specific individual or team.

In general, the ecological sport psychology delivery framework raises an awareness of different cultures (specific sport, national and organizational) and their influence on practitioners' assessment before and during the intervention. These notions are supported by researchers in culturally-informed sport psychology, who claim that for a long time practitioners and researchers within sport psychology have turned a blind eye to the potential complexities associated with the integration of the cultural aspects of sport psychology (Schinke & Moore, 2011). Schinke and Moore (2011) emphasize that cultural factors seem to have an impact on the numerous factors involved. These factors comprise the work of the practitioner as well as the athlete, including socioeconomic background and status, race, socialization, sexual orientation, religion, gender, and geographic location. They furthermore suggest that personal variables "impact the nature of the relationship, intervention strategies, and intervention outcomes with athletic clientele" (p. 284). Along the same lines, Ryba and Wright (2005) propose similar perspectives. They state that one possible reason is the inevitable complexity associated with the formal integration of culture as a part of service. It is not only a matter of understanding the other, but also oneself (the practitioner) as a cultural being (Schinke & Moore, 2011). These perspectives point towards similar notions related to improving the delivery of applied sport psychology through reflective practice. As outlined, and following the perspectives of culturally-informed sport psychology, the ESPD model contributes to the area of reflective practice as well as providing perspectives on an awareness of culture within the professional training and development of applied sport psychology practitioners. Reflection improves self-awareness and generates knowledge in action that can enhance the

delivery of applied sport psychology. In particular, this dissertation underscores the need for, and potential value of, reflective practice as a mechanism to assist practitioners in developing their effectiveness (Cropley, Hanton, Miles, & Niven, 2010; Cropley, Hanton & Niven, 2007). Cropley and colleagues (2010) illustrate this by explaining that there is a need to "understand the philosophical underpinnings of approaches to applied sport psychology" (p. 192). However, this dissertation goes even beyond this claim by underscoring that the practitioner in professional sport needs to integrate an additional awareness of culture (specific sport, national and organizational) in applied sport psychology.

Governing principles of applied sport psychology from an ecological perspective

Besides philosophical underpinnings as a prerequisite for professional training and development of applied sport psychology practitioners, the key idea of this dissertation is that culture (specific sport, national and organizational) is important for reflective practice in applied sport psychology. In the ESPD model, it seems that culture serves as both a precondition for as well as a constraint in the application of sport psychology in professional football, depending on the kind of culture involved. National culture is a precondition and informs the practitioner of the phenomena of the specific country and how these phenomena relate to the specific context in which the practitioner is working. However, organizational culture could at the same time be a constraint that informs the practitioner of certain organizational phenomena encountered in that specific environment. Together, they provide information about that unique context (e.g., club or organization) that the practitioner is situated in and he or she needs to be aware of when applying sport psychlogy in elite sport. The specific kind of culture is therefore important and could be a constraint or a precondition in a specific talent development environment. These distinctions and specific kind of culture should inform the asessment and intervention strategy in a given context and subsequently how a sport psychology service is delivered.

In line with the above, a practitioner who takes the ecological perspective (being aware of

theoretical perspectives, educational background and culture) will be guided by a number of principles in his/her work. Based on the holistic ecological approach, its working models (Henriksen et al., 2010a; Henriksen et al., 2010b; Henriksen et al., 2011) and the ESPD model, I suggest the following six principles as fundamental governing principles to guide applied sport psychology inspired by a holistic ecological perspective. I will expand the perspective to include other sports (not only football and its specific culture), but if the practitioner adopts this framework it is crucial to have an awareness of the sport-specific culture and how it affects the practice of sport psychology and intervention strategies. Although this dissertation has mainly focused on the ecology of talent development, the following principles also integrate holistic perspectives. These principles should be seen as a guide to uncovering preconditions and constraints in the application of sport psychology in elite sport from a holistic ecological perspective.

Firstly, the practitioner should acknowledge that the athlete is embedded in an environment. This fact should not be disregarded in the service delivery, but should inspire the practitioners to conduct their interventions inside the athletes' environment rather than remove the athletes from their natural setting and into the practitioner's office, since learning is often bound to the context in which it is learned (Barab & Plucker, 2002). This first point also suggests that practitioners should aim to involve the athletes' environment (coaches, managers, teammates etc.) in the intervention in order to facilitate support and clarifying transition demands for the athletes during the intervention.

Secondly, the intervention should be built on a thorough assessment of the environment from a holistic perspective, and should examine strengths and weaknesses in the organizational culture and micro and macro environment within and outside of the sporting domain. The practitioner should be clear about the importance of the culture (e.g., sporting or national culture) and how it informs the practice of sport psychology in the specific context and sport. For practitioners to be effective in professional organizations and clubs, there is need for a technology that is adequate for the complexity of the task that the practitioner needs to solve.

Thirdly, the practitioner should not only work with the individual athletes but also aim to

optimize the entire environment around the player or team. Research suggests that environments are most successful in supporting athletes when the efforts of different elements in the environment (school, club coaches, national team coaches, parents and others) are integrated rather than fragmented or in opposition. Therefore, the practitioner should be focused on creating a good dialogue among the environment's different agents. This also involves proximal role models, the integration of professional players in the talented players' development, and giving priority to training groups with supportive relationships rather than individualized training.

Fourthly, an environment is always situated within a larger cultural setting, e.g., a national culture and a sport-specific culture. A practitioner should take this cultural setting into consideration and plan the intervention accordingly. An intervention in a Danish football club should consider several issues: a) that the Danish society is characterized by ideals such as equality and welfare, b) the professional clubs spend huge amounts of money in professional football, but a remarkably low amount is spent on developing talent development, c) Danish football is characterized by a collective approach to challenges and solutions in football and d) due to a directive, the best youth teams do not have to fight against relegation each season and are able to combine school and football.

Fifthly, the intervention should aim to create and maintain a strong and coherent organizational culture. Research from a holistic ecological perspective suggests that an organizational culture in which espoused and enacted values correspond provides stability and clarity to the group and allows people to focus on the task.

Sixthly and finally, it is suggested that successful environments see the athletes as whole human beings and support the development of a holistic package of psychosocial skills that will be of use to the athletes, not only in their sport but indeed in their other life-spheres as well (Martindale & Mortimer, 2011). Additionally, the club is aware of, and targets, important psychosocial skills and prepares young players for forthcoming within-career transitions.

CHAPTER 7. REFLECTIONS ON THE RESEARCH PROCESS

In this chapter, I will address and discuss the limitations and weaknesses of the dissertation. The holistic ecological approach is still a new perspective in talent development research in sport and does not yet provide a solid base upon which to formulate a theory on the nature of successful ATDEs. This limitation can be addressed through further studies using different methodologies. However, case studies of successful environments in different cultures (e.g., outside Europe) and different sports (e.g., other team sports and early specialization sports) are needed to supplement and augment this dissertation. Besides sport-specific culture, the title of the dissertation *"Made in Denmark"* also points towards the importance of national culture and how it informs the reflections, assessment and intervention strategy in a specific context. It is important to be aware of the fact that sport psychology services in different sports and countries would inform the assessment and intervention strategy differently than described in this dissertation. A limitation of this dissertation is related to culture as a term. I address the term culture and briefly describe it in Chapter 1 but do not, despite the importance of culture in sport psychology service, uncover and describe it thoroughly. The reasons for not addressing culture to a greater extent are related to the aim of the dissertation. The primary focus has been to uncover preconditions and constraints involved in the application of sport psychology. In that sense, it is my belief that the most important issue is to describe how the practitioner is informed by culture rather than define culture from various theoretical perspectives, regions, sports or countries. It is of importance to highlight the link between culture and practitioner, as this link is important for how the practitioner makes his/her assessment and intervention strategy. In that sense, the aim is to show that the practitioner (or the coach and others in the environment) is both bearer and creator of culture, which is of relevance for intervention strategies in talent development and football.

On the one hand, the holistic ecological approach seems more comprehensive and demanding, as coaches need to coordinate communication and relations in and with the

environment (coaches, athletes, managers, sport director or team assistants). There are some issues and limitations regarding the intervention program. One limitation of the program is the player's age and maturity level. The program works well with this age-group (15-17 years), but younger players could find it too difficult to reflect about life as an athlete and think holistically about their careers. The need to develop the system around the athlete and adopt an ecological perspective in service delivery should not imply a lack of attention for the persona beyond the athlete. One criticism of the intervention program was that it developed the under-17 team but did not work with the individual player in the process. Despite these potential pitfalls, the holistic ecological approach could represent an even more sustainable approach as it involves praxis rooted in the environment instead of revolving around the individuals in the club. This points to the fact that programs or support are less at risk of being terminated if significant individuals (e.g., the coach) stop working in the specific club. Moreover, the intervention program described in this dissertation, although ecologically inspired, is however not holistic and the sample primarily concerned the under-17 team and coach and not an entire club or environment. To be able to launch a holistic ecological program would be a huge task and even more time-consuming than the examples presented here. Based on the working models presented by Henriksen et al. (2010a), it would involve sporting and non-sporting domains as well as micro and macro-level and represent a future research project. Nevertheless, the perspectives presented in this dissertation offer some perspectives and awareness for the practitioner aiming to apply sport psychology at club level in football. Together, these generalizations are not unlike Stake's (1995) petite generalizations.

Another critique could be that this dissertation is a nested single case study. However, Flyvbjerg (2006) argues that criticizing single-case studies for being inferior to multiple case studies is misguided, because even single-case studies "are multiple in most research efforts because ideas and evidence may be linked in many different ways" (p. 235). Additionally, the dense (nested and single) case study is more useful for the practitioner and more interesting for social theory than either factual "findings" or the high-level generalizations of theory (Flyvbjerg, 2006).

Validity and reliability in case studies?

This dissertation has been both exploratory and integrative. It has aimed to uncover the constraints and preconditions involved in applying sport psychology form an ecological perspective at academy level. I have suggested that a sufficient methodological approach is the design of a case study, based on qualitative methods, views taking during the real-time functioning of the environment and use of multiple sources of evidence.

Before the case study, my fundamental assumptions were challenged. In particular, the following questions arose, due to my meeting with the complex world of football: Are changes predictable and controllable, or do they appear as random incidents? Is it possible to uncover and account for a complex reality in football? Subsequently, additional questions about rigor arose, such as: Are there enough data to support significant claims? Did I spend enough time gathering interesting and significant data? Is the context or sample appropriate given the aim of the dissertation? Did I use appropriate procedures in terms of field note style, interviewing practices, and analyses procedures? Was I aware of my pre-conceptions and my dual role as researcher and practitioner? (Tracy, 2010) Moreover, for quantitative research, credibility is earned through reliability, replicability, consistency, and accuracy (Golafshani, 2003). However, these criteria only loosely relate to qualitative research using a human "instrument" and are not aimed at uncovering roles and interactions in talent development environments. Qualitative credibility is instead "achieved through practices including thick description, triangulation or crystallization, and multivocality and partiality" (Tracy, 2010, p. 843), which I have tried to account for in the presentation of the findings.

The literature is certainly replete with criteria regarding the quality of validity, including concepts such as catalytic validity (Lather, 1986), empathetic validity (Dadds, 2008), crystallization (Richardson, 2000), tacit knowledge (Altheide & Johnson, 1994), transferability (Lincoln & Guba, 1985), ecological validity (Bronfenbrenner, 1977) and so on. The abundance of concepts involving

qualitative excellence undeniably illustrates the creative complexity of the qualitative methodological landscape (Tracy, 2010). In line with the quantitative community, the qualitative researcher takes the stance that good research should aim for validity, reliability, generalizability, and objectivity (Winter, 2000). Reliability is related to whether the findings of the dissertation will be reproducible at other times and by other researchers (Kvale & Brinkmann 2009, 271). In this dissertation, reliability is related to the transparency of the research strategy. Transparency is related to how the researcher clarifies the procedures and steps of the study and its findings. Tracy (2010) goes beyond these suggestions and argues for eight key markers of quality in qualitative research and the task for qualitative researchers is to provide: (a) worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence. In terms of this dissertation, the task therefore was to make sure that the descriptions and explanations were rich, bountifully supplied, generous, and unstinting (Weick, 2007). In this case, richness is generated through a "requisite variety" of theoretical constructs, data sources, contexts, and samples. Applying the concept of requisite variety to qualitative rigor suggests that "a researcher with a head full of theories, and a case full of abundant data, is best prepared to see nuance and complexity" (Tracy, 2010, p. 841). I have sought to ensure transparency by making a detailed description of the research process in this dissertation. I have exemplified the procedure, data analysis and tried to make explicit my pre-conceptions, sensitivity to the environment and dual role by creating distance and reflecting on my interpretations. Moreover, I have continually sought to verify and validate the analysis and provide critical interpretations of the data. During the data collection I discussed my dual role and various theoretical perspectives and interpretations with the co-authors (and supervisors), thereby ensuring peer validity (Kvale & Brinkmann, 2009). This is additionally ensured through collaboration with the co-authors (and supervisors) to establish the accuracy of the interpretations. Triangulation of data sources and data collection techniques helped to establish the trustworthiness of the analysis and findings (Patton, 2002). Additionally, ongoing member reflections took place during the individual studies (Tracy, 2010). Participants were invited

to read the transcripts of their interviews. The coaches and manager of the club received a full, written copy of the researcher's analysis and interpretations, which they discussed with the author.

Correcting misunderstandings in the case study

The case study has been criticized as an unscientific (biased) research method that does not provide a basis for generalization and therefore is irrelevant in the social sciences (Flyvbjerg, 2006). However, in correcting five central misunderstandings about case studies, Flyvbjerg also presents support for choosing the method of a case study, which is applicable in this dissertation. A first point regards the nature of human learning. Whereas beginners follow rule-based formulae and rationality, true experts act more fluidly based on tacit knowledge (Dreyfus & Dreyfus, 1986). Context-dependent knowledge derived from experience with discrete cases is "necessary to allow people to develop from rule-based beginners to virtuoso experts" (Flyvbjerg, 2006, p. 221). Therefore, I argue that, although the wider case may not provide context-independent rules and guidelines to be followed across time and domains, it will provide practitioners in the field of applied sport psychology and talent development with an example from which to learn.

A second criticism that is relevant for the present dissertation states that case studies cannot provide a basis for generalization. As previously mentioned, this dissertation provides details about petite generalizations as well as grand generalizations (Stake, 1995) and how sport systems and associations need to be aware of cultural aspects when integrating sport psychology as a part of developing footballers in professional clubs.

Flyvbjerg (2006) argues that case studies do play a role in theory building as well as theory testing, and that "the strategic choice of case may greatly add to the generalizability of a case study" (p. 226). A final criticism relevant in the present setting is that case studies contain more bias towards verification (confirming the authors' preconceived notions) than other research. On the contrary, Flyvbjerg (2006) argues that, when reading case studies, "it is falsification, not verification that characterizes the case study" (p. 235) because the case is likely to "talk back".

Tracy (2010) denotes sincerity as a quality criterion of qualitative research, which involves "honesty and transparency about the researcher's biases, goals and foibles" (p. 841). A key issue is to be aware of one's own preconceptions (as a researcher, practitioner and trained footballer) and *not* be seduced by them. In order to adjust for this issue, I tried to stay open towards suggestions from researchers as well as practitioners. Additionally, the present dissertation has a *worthy topic*, describing social perspectives on talent development and sport psychology, which according to Tracy (2010) is another of the eight universal criteria for judging the quality of qualitative research.

Presentation of data

I have played football for many years, which in terms of being the author of this dissertation could be perceived as a limitation as well as strength. One of my experiences in AGF football club was that there seems to be a difference (in contrast to previous experiences) between being "a part of" (and thereby have "currency" in) the environment and not being a part of the football community. Being a part of the football community influences the stories and the level of descriptions that are shared in the environment, because people tell their stories when they feel safe, and footballers feel safe with other footballers.

In my view, describing qualitative research can in some ways be unsatisfying, as you are never able to unfold all the stories and descriptions on relatively few pages. This issue has been present in this dissertation and questions have arisen as to the sufficiency of the data to describe in depth and rich stories of AGF football club. In the current form of the dissertation, this could be seen as a weakness. So a dilemma arises. The qualitative researcher wants to describe the complexity of the talent development environment and at the same time adhere to the criteria set out by journals in sport psychology. In addressing this dilemma, Sparkes (2002) suggests three different ways of presenting data as the "scientific tale", "realist tale" or "confessional tale". The scientific tale is the conventional tale within natural sciences as well as social sciences. He emphasizes that this way of telling tales adopts an objective and positivistic understanding which in general

impersonates the style of physics. In contrast to this way of telling, Sparkes outlines the realist tale which is the form qualitative researchers use in inductive projects within physical activity. Given the qualitative researchers' basic assumptions and interests, and the lack of the all-embracing style, the creation of authoritative texts is extremely problematic – particularly in relation to the issue of "voice(s)". For example, the discourses of science have a tendency to deny its "objects" a voice. The confessional tale puts the "I" of the researcher into data (Sparkes, 2002). A criticism could be that I should have put more "I" into the descriptions of each paper and thereby highlighted the importance of my dual role as practitioners and author. In that perspective it would have been beneficial (for the reader and me) to relate about my own struggles and challenges and so this practical research knowledge is not forgotten during the process.

CHAPTER 8. CONCLUSION

This dissertation specifically aimed to uncover constraints and preconditions involved in the application of sport psychology from an ecological approach in a successful Danish football academy. To reach that goal, three interrelated research objectives were addressed: 1) Which psychosocial skills are important in a youth football academy and how are these psychosocial skills practiced in the environment? 2) To provide a holistic description of a successful ATDE in a team sport (i.e., football), namely AGF football club in Denmark and examine the factors that influence the environment's success in developing future professional players. 3) To provide a detailed description of an intervention program from an ecological perspective and to uncover the participants' experiences during and after the intervention. Based on an intervention program, the agenda was additionally to reinforce the culture of psychosocial development in the daily practice of a professional football academy, provide skills to succeed at professional level and create stronger relations between the youth and professional departments.

In this dissertation, systems theory takes into account how culture guides the practitioner and the need to be reflective about the context in which the practitioner operates. The present dissertation transcends linear explanatory talent development models and describes the need for complexity in the analysis of talent development and sport psychology in sporting organizations. Moreover, this dissertation quite simply points to the fact that practitioners need to be aware of various preconditions and constraints before assessing, developing, and applying intervention strategies in professional football. There are several preconditions and constraints involved in sport psychology services in professional football and a key issue in this dissertation is related to the notion of culture. The different chapters of the dissertation each unfold how and in what way culture informs the practice of sport psychology. In that sense, culture seems to be "the" component to be aware of when applying sport psychology in football (or another sport), whether it is football culture, national culture or organizational culture. Furthermore, culture constitutes both a precondition and constraint, depending on the kind of culture involved. Each of these variations of

culture guides the practice of sport psychology in the club and country. The reflections (often based on dominating theories and research trends) that a practitioner brings to the situation influence his/her assessment and subsequently the intervention strategy. The ESPD model underscores the importance of the reflexive practitioner who is aware in general, not only of the dominating theories and research trends, but of the cultural (football, national and organizational) influences on the assessment of the situation and the intervention strategy.

For practitioners to be effective in professional football, there is a requirement for a technology that integrates different levels in sport psychology services. In order to create solutions on a complex level, practitioners need a "technology" that is adequate for the complexity that the practitioner needs to solve. One major problem with the acceptance and implementation of practitioners (e.g. instruments) in applied settings is the fact that many theories from basic research are not practical enough to solve the actual problems of coaches and athletes. Together, these notions reveal that the use of MST by novice practitioners is too simple a solution to apply in complex organizations, clubs and cultures.

EPILOGUE

The final issue that needs to be addressed is how we would describe Danish football culture and what could we call her? Summarizing Vialli's description, English football is pictured as hard and relentless in contrast to Italian football pictured as elegant and technical, but how would Vialli's lenses perceive Danish football, taking into consideration its social, cultural (national, football and club) and financial characteristics? The empirical data from this dissertation provides some perspectives that could narrow it down even more. My first suggestion would be to call her Monica, but why? The straightforward answer (and maybe too easy) is that Monica is a combination of Mary (English football) and Veronica (Italian football). My second suggestion would be that Monica is created from the knowledge that I have from the data and participants of the study. The English part of Monica revolves around the fact that hard work, effort, discipline, social skills and the family feeling are the keys for success as a youth player, thus emphasizing the English part of the name. Additionally, the Italian part of Monica stems from the professional players' and coaches descriptions, namely that in the transition to the professional levels it is all about perfectionism, quality, obsession with detail, being professional and not necessarily having close relationships, thus revealing notions similar to those of Italian footballers. In that image, Monica could therefore be described as trustful, solid, hard working and sociable at the beginning. However, after a couple of years she starts to have opinions about your clothes, being obsessed about small details and at some point the relationship becomes different and maybe superficial. Maybe it is true that Monica is somewhat "continental" and inspired by two great football cultures, however the question arises as to whether this image is the best for Danish talent development in professional football? One thing that we need to be aware of is that Monica is "Made in Denmark" (she exists within our culture) and thus we need to be sensitive towards the image we create of her, because that decision would be culturally and ecological decisive for talent development and sport psychology in Denmark in the coming years.

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APPENDICES

Appendix 1: Interview guides

- For under-17 players

Interviewee's background	Tell me about yourself and your association to this environment • How long have you been in the club/team? • How did it come about, that you started in this club? • How do you feel about being a part of this environment? What do you think are the keys to your personal success?
Introduction	Do you think the environment is a successful talent development environment? • What tells you that it is successful? • What do you consider the secrets of its success?
Description of the environment based on the ATDE model Micro-environment	Who helps you in your efforts to make it to the elite level? Who hinders you? How would you describe your coach? • What is his role and tasks? • What are his values? What do you think about the older elite athletes in the club? • Do you have contact with them? • What characterizes this contact? In terms of your daily sporting life, what can be said about the role of: • Younger athletes in the club? • School? • Your family? • Experts in the club [such as physiotherapist and sport psychologist]? • Your friends inside and outside sport?
Macro-environment	Are there people, inside or outside sport, that you look up to? How would you describe youth culture? • What do you feel are predominant values among youth in general? • How do you feel youth culture influences your daily sporting life? How would you describe your national culture? • Can you put a few words to what it means to be Danish? • How do you feel national culture influences your daily sporting

	life?
Relations within the environment	How do you see the way in which the club interacts with the environment around it? Please provide examples of the club's working relations with: • School • Your parents • Other clubs and teams
Success factors based on ESF model Preconditions	How would you describe the club's or team's main resources? In daily training, do you feel the club/team has sufficient resources in terms of money and coaches, for example?
Process	Please describe daily life in this team • Training – how much do you train? How is it organized? • Competitions • Camps • Do you have social events outside sport? Provide examples. • Other?
Organizational culture	What characterizes the culture [team values] in this environment? Please tell me [a story] about specific episodes that you feel describe your team values. Do you have specific symbols such as logos or styles of clothing that are salient to your team? • What do they mean to you? Do you have specific traditions? Please provide examples. What are the goals of your season? • Who sets these goals? • How much influence did you have on the goals? Does the club have a specific motto/vision/mission-statement? • What does it state? • How do you experience this motto/vision in your daily routines in the team? If I was to invite another athlete from your sport to be a part of your team for a week – what would he or she find to be most different?
Individual development	Tell me about what you learn in this environment • What attitudes or values are appreciated in this environment? • When is the coach, for example, satisfied with your efforts in training? • And in competition? • What values do you take with you from this environment?

	• Do you learn anything that could be of use to you outside your sport?
Time frame	What can be done to make this environment even more successful? What traditions would it be wise to hold on to?

Appendix 2: Interview guides

- For club administrators/managers/coaches

Interviewee's background	Tell me about yourself and your association to this environment • How long have you been in the club/team? • What is your role/task in the club? • How did it come about, that you started in this club? • How do you feel about being a part of this environment?
Introduction	Do you think the environment is a successful talent development environment? • What tells you that it is successful? • What do you consider the secrets of its success?
Description of the environment based on the ATDE model Micro-environment	In terms of people and institutions around the athletes, what are the important resources in your efforts to develop the athletes? And what are the barriers? In terms of the junior elite athletes' athletic development, what can be said about the role of: • The coach? • The club's elite athletes? • Experts? • Younger athletes? • Friends inside and outside sport? • Family? • School?
Macro-environment	Let's take a look at the wider environment. In relation to the athletes' athletic development and chances of making it to the elite level, what can be said about the role of • The educational system – does it support the athletes' sport careers? • The federation? • The media? In terms of being a barrier or a resource in the athletes' athletic development, how would you describe: • The national culture? • The predominant youth culture? • The culture of your specific sport? • The general sporting culture? Which of these cultures is most visible in the daily routines in the environment?
Relations within the environment	How do you see the way in which the club interacts with the environment around it? Please provide examples of the club's working relations with:

	• School • Parents/family • Related team or clubs • Federation What do you do to maintain good working relations?
Success factors based on the ESF model Preconditions	Please, tell about the history and current structure of the club/team. How would you describe the club's or team's main resources? • Facilities • Coach education level • Other staff • Financial resources • Other?
Organizational culture	What characterizes the culture [predominant values] in this environment? If I was to invite another [coach or manager] from your sport to be a part of the club – what would he/she find to be most different? Please tell me [a story] about specific episodes that you feel describe the team's values. Do you have specific symbols such as logos or styles of clothing that are salient to your team? • What do they symbolize? Do you have specific traditions? Does the club have a specific motto/vision/mission statement? • What does it state? • Please describe the efforts you undertake to live in accordance with these visions and values? What do you do to maintain this culture?
Individual development	How does being a part of this particular environment affect the talented athletes? • Sport-specific skills • Attitude towards training • Skills that could be of use for the athletes outside sport
Time frame	What future challenges do you foresee for this team? What can be done to make this environment even more successful? What traditions would be wise to hold on to?

Appendix 3: Interview guides

- Psychosocial skills

Information about psychosocial skills

Psychosocial skills can be behavioural (to help other persons), cognitive (make effective decisions), social (communication, cooperation), or personal (setting goals). Psychosocial skills can help athletes to succeed in sports, and sometimes transfer the skill to non-sports areas where they are used with success. Learning to deal with anxiety/stress by penalty may be an example of developing a psychosocial skill. Psychosocial skills are skills like a technical skill that can be learned through demonstration, training and exercise.

Questions:

How important is the mental realm of sports?

How do you get help with creating/working with psychosocial skills?

What skills do you prioritize?

Who supports the psychosocial skills?

Provision of support? Practical? Emotional? Cognitive?

What psychosocial skills do you think are important to your personal success?

Do you have a priority on the team/in the club of what is important to you in the mental area?

Try to give some examples of what you think are important psychosocial skills to reach the elite?

How do you train these skills?

How would you like to train them?

PAPERS LINKED TO THE DISSERTATION

PAPER I.

Psychosocial skills in a youth soccer academy: A holistic ecological perspective

Larsen, C. H., Alfermann, D. & Christensen, M. K. (2012). *Sport Science Review*, Vol. XXI, No. 3-4, 51-74. doi: 10.2478/v10237-012-0010-x

PAPER II.

Successful talent development in soccer: The characteristics of the environment

Larsen, C. H., Alfermann, D., Henriksen, K. & Christensen, M. K. (2013, April 15). *Sport, Exercise, and Performance Psychology*. Advance online publication. doi: 10.1037/a0031958

PAPER III.

Preparing footballers for the next step: An intervention program from an ecological perspective

Larsen, C. H., Alfermann, D., Henriksen, K. & Christensen, M. K. (2013)

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Psychosocial Skills in a Youth Soccer Academy: A Holistic Ecological Perspective

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Objectives: The latest research in talent development show that more varied psychological and especially social and cultural circumstances play an important role in talent development. This study assumes an ecological approach to explore which psychosocial skills are important in a youth soccer academy and how psychosocial skills are practiced in this particular environment. *Method*: The research takes the form of a case study. Data were collected from multiple perspectives (in-depth interviews with managers, coaches and players), from multiple situations (observation of training, competitions and meetings) and from the analysis of documents. *Results*: The findings reveal explicit (being practiced and talked about) and implicit (indirectly practiced and talked about) psychosocial skills in the youth soccer academy and a differentiation between internal and interpersonal psychosocial skills. *Conclusions*: Important explicit psychosocial skills are motivation, self awareness and the ability to work hard. However, even more important for the young soccer players dealing with the transition to professional soccer seem to be implicit psychosocial skills such as managing performance and process outcomes (internal) and the ability to utilize team skills and general social skills (interpersonal). Despite the fact that the environment expects the young players to display these skills, they are only indirectly practiced. This study demonstrates the interweaving of psychosocial skills and practice in the talent development environment, and thus underlines the social construction of psychosocial skills in elite sport.

Keywords: soccer, athletic talent development environment, career transition, organizational culture, talent development, sport psychology and leisure.

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Psychosocial skills in a youth soccer academy: a holistic ecological perspective

The latest research in talent development has shown that more varied psychological and especially social and cultural circumstances play an important role in talent development (Côté, Lidor, & Hackfort, 2009). The achievement of excellent performance is about handling the diversity of challenges during everyday life (Holt & Dunn, 2004). Adolescence is the biographical period of life in which investment in great performances should be achieved and this phase of development is especially demanding for the athlete. The young athletes who take responsibility for their own careers also experience a great amount of pressure in school during this period (Brettschneider, 1999) and are expected to balance what are often contradictory demands in sport and school (Christensen & Soerensen, 2009). One only has to look at the number of successful juniors who have failed to make the transition to senior sport and have either dropped out of the sport or compete at lower levels (MacNamara, 2011). The path to professional sport is complex and demanding for players of youth soccer (i.e. football) and only 20 % of teenage players recruited to professional teams are still in these teams beyond their teen years (MacNamara, 2011). The athlete's resources and psychological skills are a key factor for coping in future transitions (Alfermann & Stambulova, 2007). In addition to athletic skills, psychosocial skills are key determinants of those who emerged as talented athletes, maintained excellence and were able to balance sport and school in the process (Henriksen, Stambulova, & Roessler, 2010). Research of training programs highlight that it is necessary to incorporate a holistic "skills package" containing a wide variety of cognitive, perceptual and motor skills (Janelle & Hillman, 2003), as these "teachable" factors are important in distinguishing the best performers at later stages (Helsen, Hodges, Winckel, & Starkes, 2000). However, in order to establish effective youth programs and match transition demands there is a need to know which psychosocial skills are needed by adolescent soccer players.

Reviewing relevant literature, psychosocial skills are often associated with terms such as life skills, positive youth development, social-emotional growth (Gould & Carson, 2008), psychological skills (Danish et al., 1995, p. 23), psychological characteristics (MacNamara, Button & Collins, 2010; MacNamara, 2011), psychosocial competencies and assets (Harwood, 2008). Despite this lack of a precise definition psychosocial skills are, in this case, a key determinant in the talent development process (MacNamara et al., 2010) and are competencies divided into internal and external assets. According to Harwood (2008), internal assets represent attributes of the individual such as commitment to learning, goal setting, emotional control, self-esteem, hard work ethic or interpersonal competence (e.g., communication skills or social skills), whereas external assets

are characterized by the quality of the environment shaping the child, including access to positive role models, social support, and positive peer influence. In addition, an early emphasis upon psychosocial skills in soccer may enhance the ”young player” alongside equipping the “young person” with internal skills transferable to other life domains (Harwood, 2008).

An ecological approach to exploring psychosocial skills. This study assumes an ecological approach (Bronfenbrenner, 1999) to explore which psychosocial skills are important and practiced in the environment of a youth soccer academy. From an ecological perspective it makes no sense to perceive psychosocial skills or coping strategies as inner, independent and stable personalities. Instead, psychosocial skills are perceived as socially constructed, culturally contingent, and highly dependent on the specific environmental conditions. An ecological perspective shifts the perspective away from the individual athlete to the context in which the athlete is developing. Bronfenbrenner's ecological systems theory represents an important cornerstone of modern developmental science (Bronfenbrenner, 1979). It is a basic premise of ecological systems theory that development is a function of forces emanating from multiple settings and from relations between these settings (Bronfenbrenner, 1999). The theory is based on four main concepts: Person, process, context, and time, and it regards the dynamic relationships in the person-process-context-time interconnection. Person-process-context-time is based on individual characteristics (e.g. psychosocial skills), proximal process (e.g. activities and practice in the environment), contextual variables (e.g. the environment in which the activities are happening), and the temporally evolving nature of relations between talented athletes and different levels of their environment. The talented athletes interact in proximal micro systems (e.g. patterned activities, roles and interpersonal relations that a person experiences in a setting), meso systems (e.g. interrelations among major settings such as training and matches in the soccer setting and lessons in the school setting), exo systems (e.g. other specific formal and informal social structures) to distal macro systems (e.g. overarching institutional patterns of the culture or subculture) (Bronfenbrenner, 1979; Bronfenbrenner, 1999). This article aims to uncover the development of psychosocial skills in young soccer players in relation to their micro-, meso- and macro environment, and intends to explore (a) which psychosocial skills are important in a youth soccer academy and (b) how these psychosocial skills are practiced in the environment.

Method

The study was organized as an explorative integrative and qualitatively-oriented case study in a successful Danish soccer environment. A case study allows researchers to retain the holistic and meaningful characteristics of real-

life events (Yin, 2009). Moreover, Kruuse (2008) argues that case studies are meaningful if complex issues are to be investigated in which many different factors can influence the results and where it is not possible to control these variables. For these reasons, the case study was an appropriate methodological choice for this study.

The case study

Our overall approach to the case study is the so called explorative integration, which is a cyclic approach of a continuous dialogue between pre-chosen theories, generated data, our interpretation and feedback from our informants, which will hopefully lead to more inclusive theory building or even understanding (Maaloe, 2004). The case study is a strategy to empirically explore chosen contemporary phenomena in its natural context by using sources of data that can be used as proof of evidence (Robson, 2002). Maaloe (2004) defined a case study as an "empirical inquiry that investigates a real-life phenomenon within its real-life context" (p. 5). Furthermore, researching into "the natural occurring experiments" (Yin, 2009, p. 4), means studying phenomena that we do not control while we study them. According to Maaloe (2004), case studies are focused on three main types of phenomena: Systems, courses of action and persons, and therefore case studies are the only way to explore links between events, reactions (including decisions, emotions and reflections) and behaviors as they emerge in real-life situations. Accordingly, this case study used different sources of data (observations of actions, interviews with different persons and analysis of documents in the environment) and via triangulation we applied several analysis methods of the multifaceted data about the same phenomenon. Furthermore, the multiple source strategy provided us with the means to distinguish between private and shared perceptions of what was going on within the environment as well as evidence of what it means to those involved.

Case selection

On the basis of expectations about its information content (Flyvbjerg, 2006), we selected one of the oldest and most successful Danish soccer clubs (AGF) and its affiliated players, staff, and nearby environment in the city of Aarhus for the case study. We used an information-oriented case selection method known as "paradigmatic case selection", that is the case is selected with the aim "to maximize the utility of information from small samples and single case [and] to develop a metaphor or establish a school for the domain that the case concerns" (Flyvbjerg, 2006, p. 230). Aarhus is the second largest city in Denmark, and it has one of the highest concentrations of talented and elite athletes in Denmark. The club is part of ESAA (Elite Sport Academy Aarhus),

which is an institutional set-up that provides young talented athletes with the opportunity to combine an educational career with an elite sports career. ESAA is based on a partnership model with the local elite sport clubs, local educational institutions and the national sport federations. In 2010-2011 ESAA co-operates with 15 different sports and more than 350 athletes, 2 primary schools, 9 secondary schools (gymnasium and vocational) and the University of Aarhus (ESAA, 2011)[1].

Procedure

Contact was made with the sports director of ESAA, and in corporation with him the club was selected. After selection of the club, preliminary acceptance was gained through the manager of sports and coaches. The identity of the club is known but the identities of youth players and other persons involved in the club are anonymous[2].

Description of the case

The club consists of two departments: A volunteer, non-elite department for a wide range of soccer players, and a professional elite department for male youth teams ranging from under-13 to under-19, plus senior teams. The club has fulltime coaches for each youth team. The professional senior team is organized into a section of its own. The professional senior team is playing in the Danish Premier League and a reserved team in a separate tournament for professional teams in Denmark. In the professional senior team there is a fulltime first team coach, assistant coach and relevant experts supporting the team and staff. A team of coaches dictates the strategy for talent development and new perspectives for the youth teams. The old club house shows the stories and traditions of the club. The club is a self-contained part of the largest sports club in Aarhus (Aarhus Gymnastics Association) which was founded in 1880 as a multidiscipline sports club. Soccer joined the program in 1902. The club is one of the most successful Danish soccer clubs with 5 Danish championships and 9 Cup titles (a record). The professional department of AGF was founded in 1978. In 2005, the professional soccer department joined the newly consolidated Aarhus Elite and expanded the business to other areas; Aarhus GF (handball), Bakken Bears (basketball) and Atletion (Stadium and office buildings). AGF has a successful record for producing male youth national players and is successful in helping talented youth players to make the transition to professional soccer. This study focused on the under-17 team and its staff in the professional department.

Data Collection

Data was collected from multiple perspectives. Firstly, participant observation (Spradley, 1980) was used as the primary data collection method in the case study. The observations were performed by the principal researcher as a "moderate participant" (Spradley 1980, p. 60). We chose him to be the moderate participant because he is an educated PE teacher and a trained soccer player. We assumed that these qualities would enhance the possibilities of being a successful moderate participant in the chosen environment. As a moderate participant, he observed day-to-day training, acted as an assistant coach and sparring partner for the under-17 coach for 21 days during 7 months. The primary researcher had to be aware of the social reality and the perception of the reality by the participants (Olesen, 2001). In the observations the principal researcher focused on observing deeper structures and forces that create social displacements. Interpretations of actions, relations between the parts of the environment and the interests in the environment were main foci. Therefore the observations were based on real time and in real life contexts. The challenge was to be aware of and confront the straightforward perceptions and the apparent perceptions as they were shown in everyday actions in the environment. During the observations the principal researcher used descriptive field notes to capture different perspectives and variation in the information of the participants (Patton, 2002).

Secondly, the primary researcher conducted 15 individual interviews, which lasted between 40 and 90 minutes. Interviewees were selected on the basis of interviewing in both the micro- and macro environment. Most of the interviewees are connected to the club, which represents the closest and most important relation to youth players. Furthermore, school and sport coordinators from primary and upper secondary schools were interviewed for highlighting the communication and relation between school and club. The interviews were semi-structured (Kvale & Brinkmann, 2009) which allowed the interviewees freedom to discuss issues that were personally important to them. Within the semi-structured format open-ended questions were used to yield in-depth responses about the interviewees' experiences, perceptions and knowledge about the environment and psychosocial skills. Using the semi-structured approach, the principal researcher had questions on a schedule, but was guided by the schedule rather than dictated by it (Patton, 2002).

Finally, archives and documents were used as a substantial category of data in the case study (Ramian, 2007). The documents included were newspaper articles involving talent development in the club, homepage of the club, training plans, season plans, calendar, internal information about talent development, match evaluations, match statistics, documents from the municipality involving

sport and school, yearly reports from the municipality and the club's code of conduct. The documents were compared to interviews and observations in order to establish evidence for important psychosocial skills in the environment (see Table 1, for a full review of the collected data and participants).

Table 1. Collected data in the survey

Interviewees	1 manager of sports; 1 club manager; 1 professional coach; 2 youth coaches; 4 youth players; 2 professional players; 1 school and sport coordinator in primary school; 2 school and sport coordinators in upper secondary school and 1 consultant from the municipality.
Observation time	170 hours from main season to off season and from pre-season to peak season.
Activities	Practice; competition; training camp; practicing alternative sports in school; during school sessions; and youth player education seminar.
Informal talks during observations	Youth players, professional players, coaches, managers, administrators, parents, club staff and school coordinators
Archival data used	Club mission statements, articles involving talent development, homepage of the club, training plans, season plans, calendar, internal information about talent development, match evaluations, match statistics, documents from the municipality involving sport and school, yearly reports from the municipality and the clubs code of conduct.

Data analysis

The interviews were audio recorded and transcribed verbatim. Transcriptions were subsequently sent to the participants for verification. Full anonymity was guaranteed to the participants in the study. The data analysis were based on an abductive strategy (Dubios & Gadde 2002; Chamberlain, 2006) and consisted of three steps using Nvivo 8 coding software. The first step consisted of a categorization (Kvale & Brinkmann, 2009, p. 201) of psychosocial skills in either internal or interpersonal, inspired by Harwood (2008). The second step was a theoretical reading (Kvale & Brinkmann, 2009, p. 238) of data in the two

categories with the purpose of generating new low order themes. This step was inspired by Jones and Lavallee (2009) and generated dimensions of familiar phenomena as well as new low order themes (Kvale & Brinkmann, 2009, p. 238). The first two steps of the analysis were based on data from the interviews. The third step consisted of a more open reading of data and revealed a deeper layer consisting of explicit (being practiced and talked about) and implicit (indirectly practiced and talked about) psychosocial skills. This step of the analysis was mostly based on observations, archives and documents, and it established ecological validity to the data (Bronfenbrenner, 1979).

An on-going member-checking process with coaches was also completed. The coaches and manager received a full, written copy of the anonymous results, which they discussed with the principal researcher. This member-checking process (Lincoln & Guba, 1985) as well as peer validity (Kvale & Brinkmann, 2009), with the second and third author helped establish the accuracy of our interpretations. The triangulation of data sources (i.e., coach's perspectives) and data collection techniques (i.e., observation and interview) helped to establish the trustworthiness of the analysis and findings (Patton, 2002).

Results

Our analysis of data resulted in an overall distinction between explicit and implicit psychosocial skills across two high order themes: internal and interpersonal (Harwood, 2008). The interview text revealed that participants spontaneously and to a large degree express and talk about internal psychosocial skills, while reports on interpersonal psychosocial skills were often initiated by the principal researcher's questions from the interview guide. This may explain the amount of interview text skewed towards internal low order themes (especially self awareness and ability to work hard). However, this does not mean that we can conclude internal psychosocial skills are more important than interpersonal psychosocial skills (see table 2), only that the participants related straightforwardly more aspects of internal psychosocial skills rather than interpersonal psychosocial skills as a part of the shared articulated discourse in this particular environment. Furthermore, our observations and the informal talks during observations revealed that social skills in particular seemed to be more or less implicit in the environment. Consequently, we present the results in two high order themes: internal and interpersonal psychosocial skills. The descriptions of the appertaining low order themes include analysis of explicit and implicit aspects of each low order theme. Table 2 shows a matrix of our interpretation and categorization of data into the two main pairs of themes: internal and interpersonal psychosocial skills as well as explicit and implicit psychosocial skills, and the appertaining low order themes.

Table 2. Coding framework: Psychosocial skills in Aarhus Gymnastics Association (AGF).

INTERNAL SKILLS		
Low order themes	Raw data	
	Explicit skills (Being practiced and talked about)	**Implicit skills (Indirectly practiced and rarely talked about)**
Self awareness	Reflexive about development and how to act in different situations Task and long term orientation Belief in own talent and skills Awareness of demands Responsibility Holistic awareness: person first, then talent	Learning to be mature Dealing with unknowns Patience Accepting a different life Self confidence Reflexive about career and termination
Goal setting	Working on strengths Quality in goals	Goal setting skills – long and short term goals Setting own goal
Motivation	Motivation to win and succeed Motivation to improve Ambitious to improve - go to top level	Ability to handle and enjoy school and sport Passion and desire for the sport Drive Motivation to practice alone Self motivation
Self organization	Multi-tasking skills Time management	Prioritizing General planning skills Planning ahead of schedule

Table 2. (continued)

Ability to work hard	Ability to sacrifice social life Commitment Discipline Dealing with large amounts of practice Setting high demands for yourself	Determination
Managing performance and process outcomes	Making decisions and knowing your opponent	Learn new skills Learn from mistakes Quality in practice Handle adversity Deal with pressure Staying focused despite setbacks Dealing with stress Curious about new ways of optimizing performance
	INTERPERSONAL SKILLS	
Show respect	Accepting coach decisions Respect for teammates	Respect for older athletes Respect for coaches, managers and club staff
Utilize team skills	Team processes and goals Helping teammates	Awareness of team member personalities Wanting the best for your team mate Knowing team strengths and weaknesses Utilizing team resources Teamwork skills – being part of the group Trusting teammates Responsibility for team mates Making your teammate better

Table 2. (continued)

Appreciate family and school as resources	Utilizing support from family and teachers	Dealing with information from parents and school
General social skills	Knowledge of individual communication preferences Listening skills	Dealing with information from club and coaches Handling social life and school Socializing skills Interaction skills – being in a competitive environment Making friends Verbal communication skills Sharing information with others Utilize coaches and experts Learning the culture and the language

In the following, words marked with quotation marks are raw data (the participants' own words) from table 2.

1. Internal psychosocial skills

Within the internal category we generated six low order themes and these include self awareness, goal setting, motivation, self organization, ability to work hard and managing performance and process outcomes.

Self awareness. All participants talked about the importance of self awareness during practice and as a talented soccer player in general. The manager and the coaches said they select and develop players that are aware of their competencies on different levels (e.g. different situations and domains, short and long term development, demands in the environment) and know how to develop them. One of the youth coaches also emphasized that a talented player needs to be "aware of the demands" of the sport and what is needed to "survive" in a professional club. Another youth coach described self awareness as the ambition and eagerness to be better and be aware of what the player himself wants to improve when he is on the pitch as well as off the pitch:

> Well, it is the ambition to improve and practice. We use an expression that there is a difference if a player goes to practice and shows an understanding of why they are doing what they are doing instead of just being coached. There is a difference between the outcome and quality of the practice and the development of the player. If the player is able to coach themselves, they will improve on and off the pitch (Youth coach).

The overriding and explicit discourse among the coaches is about the players' need for self awareness in order to survive, that is, youth players have to "believe in their own talent and skills" and be "reflexive about development" and "how to act in different situations". Additionally, the coaches emphasized the necessity that both the individual player and the systems surrounding the player consider a "holistic awareness" in their ongoing development of soccer skills. Our observations support this idea that the holistic perspective is vital and a dominant endeavor in the soccer environment and also in the relation between the schools affiliated with ESAA and the club. The primary school coordinator explained that the club and the schools have a tradition of easing the everyday life for the players, because the school's values and norms are in line with those of the club. Self awareness is an important psychosocial skill on the path to success in this environment and is constructed on a holistic philosophy expressed in documents and yearly reports from the municipality. The philosophy represents a coherent and strong focus on individuality as

well as responsible career- and talent development with accentuation of the development of the individual player's self awareness and ability to be reflexive. Both the club and the school seem to echo this philosophy – at least it is present in the explicit discourse among the participants in this case study. A consultant in the municipality expressed the importance of creating awareness in the entire environment (coaches, teachers, coordinators, family) that talent development and the path to professional soccer is centered around the youth soccer player as a whole person: "Person first, then talent [...] school and sport are equally important" (Consultant from the municipality). He continued about a need of a holistic approach in the environment in general:

> It is about providing the young athletes with the fundamental knowledge about the complexity and wholeness of things. If a young athlete removes a part of the environment then he has to know that something is missing in the whole (Consultant from the municipality).

During our observations and in the informal talks we gained deeper understanding of implicit aspects of self awareness as a psychosocial skill. The players are "dealing with unknowns" about their future on the first team, they have to display "patience" and "self confidence" in order to maintain their position in the club, and they have to "learn to accept a different life" than their peers. In short, they have to "learn to be mature" while pursuing the boyish dream of being a professional soccer player.

Goal setting. Youth players, coaches and elite players all expressed the importance of goal setting as an important skill in the transition from talent to professional player, and according to the club manager and coaches the primary objective for the club is to "work on strengths" and ensure "quality in goals". The professional coach mentioned the importance of modern soccer players to be able to set goals: "Soccer is like climbing a mountain. You have to climb up all the time. On your way up there is hardship and adversity and all the time you have to set new goals" (Professional coach). One of the professional players shared his perspective and agreed that youth players need to have general goal setting skills: "If you set goals for yourself, you kind of put down on paper, exactly what you want to do, and you can see it in front of you [...] your mind kind of sets to it (ed. improving)" (Professional player). Even if the participants constantly report the importance of goal setting skills, we did not observe actual teaching or practicing of goal setting during the training or in other areas of practice. This is an example of how the environment is able to talk about goal setting as a psychosocial skill without teaching or practicing it explicitly. In this way, the explicit psychosocial skill of goal setting seems to function as an guideline – something to talk about because it underpins the self understanding in the club,

but the players mostly are left alone with "setting their own goal" and thus the actual goal setting skill becomes an implicit psychosocial skill.

Motivation. The participants mention motivation as a key quality in a youth player. One of the older professional players related:

> I think ambition is something that's really important. I think you need the motivation, want to achieve something and get better and get to the top level. I think if you don't have that real ambition to get somewhere; it is going to be tough to get there (ed. top level soccer) [...] so I think it's really important to have ambition and motivation to succeed and get to another level, and continue to improve yourself (Professional player).

Some participants describe the psychosocial skill of motivation in terms of "ambition to improve and go to the top level" and "motivation to improve" every day. It is clear from our data that the youth players know that they need to improve. However, some aspects of motivation as a psychosocial skill (e.g. the passion and desire for the sport, motivation to practice alone) were only indirectly practiced and talked about in very informal off pitch talks between players and coaches, and we did not observe situations in training or in coaching dialogues where the primary focus was the players' learning of motivation as a psychosocial skill beyond showing eagerness to improve one's own soccer skills in the actual training sessions or in matches.

Self organization. When referring to self organization it is deemed crucial, coaches, school coordinators and the municipality underlined again and again, that youth players are able to structure everyday activities and are able to multitask. As an upper-secondary school coordinator recounted: "They have to be able to use a calendar [...] arrange the day and make it work, [...] plan and be able to manage the pressure and stress in different situations" (Upper-secondary school coordinator). Another coordinator from upper-secondary school agreed that the players have a stressful day and it is a challenge to manage school and sport: "Besides school they practice about 15-30 hours, so they have to be very good at organizing the day" (Upper-secondary school coordinator). A youth player expressed the relation between the ability of structuring your day and what is needed to do it successfully, "It demands structure during the day. It demands concentration throughout the day [...] you need proper nutrition in order to have the energy to handle school and soccer one hundred percent" (Youth player). Despite the clearly expressed need for self organization we did not observe direct teaching or guidance with regards to self organization as a psychosocial skill (e.g. prioritizing, general planning skills, and the ability to plan ahead of schedule). However, the players' multitasking skills and time management skills

were often talked about and addressed on a regular basis in school, before training sessions, at the ESAA information meeting, and by coaches in the club, but the frequent mentioning of the need for self organization seemed to be an intangible reminder rather than a tangible support to the players.

Ability to work hard. The participants agreed that the ability to work hard is a fundamental skill to be able to successfully coordinate and excel in school and soccer. An upper-secondary coordinator acknowledges that the youth players handle dual careers (school and sport) and that demands a certain mentality. The club philosophy is directed towards youth players with: "A little less talent but the ability to work very hard" (Manager of sports). It is clear from our data that the ability to work hard is essential for being a successful youth player. During our observations we noted that the players were able to "sacrifice social life", "stay committed", "deal with large amounts of practice" and "set high demands for themselves". Especially the "ability to work hard" was evident in the club before, during, and after training sessions and matches. It is clear from our observations and informal talks that the ability to work hard was a pivotal part of being a successful youth player in the club, and also an integrated part of the identity of an AGF-footballer. To wear the white AGF shirt was synonymous with the ability to work hard.

Managing performance and process outcomes. A youth player described the importance of being able to learn from mistakes and being ambitious about development and process outcomes: "You have to be able to forget mistakes it you want to play at a senior top level [...] You have to set high demands for yourself all the time" (Youth player). Furthermore, the professional coach related what is needed for making the transition to professional soccer:

> The players that are curious about new ways to improve are often the ones that want to improve all the time. They ask for advice and have the extra drive, because they want to achieve the extra. And it is often these players that make it (Professional coach).

In general the professional players, club manager and professional coach related that it is crucial to be "able to handle adversity", "learn from mistakes and deal with pressure" in order to make the transition to professional soccer. From our observations there were no direct teachings of these aspects of the psychosocial skill "managing performance and process outcomes", even if this seems an essential psychosocial skill, from the professional players experience, for making the transition to professional soccer. Instead, our observations of the way in which AGF practiced "managing performance and process outcomes" point at only one strategy: The players learn to forget the mistakes and keep up the hard work.

2. Interpersonal psychosocial skills

Within the interpersonal category we generated four low order themes and these include respect, utilizing team skills, appreciating family and teachers as resources, and general social skills.

Show respect. Being a newcomer in the club, the principal researcher was introduced to the history of the club and its preceding legends as well as the almost family-like atmosphere in the club. The early observations and the following dialogues with the participants revealed an underlying value in the club that related to the importance of showing respect for coaches, teammates, older athletes, opponents, referee, officials, personnel and spectators. To show respect for AGF and those engaged in the club seemed to be a pivotal virtue to learn as a member of AGF, including the young players engaged in talent development. One of the professional players expressed the necessity to show respect, but also the importance not to be too respectful when you are a youth player at a professional level: "Show respect, but [...] have confidence in yourself" (Professional player). Another professional player agreed and went on to describe work ethic and responsibility as important skills: "I think the values within the team are showing respect to everybody [...]responsibility [...] people have to be ready to do what they're supposed to do" (Professional player). Even though the ability to show respect for older players is important (at least to the older players themselves), our observations did not show that this psychosocial skill was directly talked about. It was indirectly practiced by the coaches and the older players in their expectations to the younger players – but nobody told the youth players how to show respect and why it was important.

Utilize team skills. Connected to respect was the issue of team skills as an important psychosocial skill for developing and performing in team sport. A youth coach described certain aspects of team skills as team goals and processes involving results, performance and process goals were important skills and were practiced and talked about on a regular basis. Additionally, AGF has a family atmosphere where the focus of the players is to help each other and work towards improvement. The observations showed that it is natural for youth players to help their teammates. One of the prominent young players mentioned that knowledge of individual orientations is important to function on the team. As an ego-oriented player and leader in the team related:

> You have to remember to make your teammates better. I am a result-oriented player and when I am communicating with another result-oriented player, as with me, you have to be more specific, maybe using slightly

> harsher language than with a task- or social oriented player, perhaps talking to him during half time (Youth player).

As this youth player relates, "knowledge of team personalities" and other aspects of psychosocial such as "utilizing team skills", "knowing team strengths and weaknesses", "utilizing team resources" and "teamwork skills" were all important but rarely a part of the discourse and explicit teaching during meetings and coaching sessions in the environment. Still these aspects seemed to be important to the youth players' experience of being a part of and performing on the team.

Appreciate family and school as resources. The youth coaches and especially the youth players emphasized the importance of their family and their support networks to be able to balance sport and school. However, our observations did not show extraordinary involvement of the parents compared to what is general to Danish leisure sport. A noteworthy feature in this environment is the coordination and cooperation between sport and school, but also support from teachers at the school. As a youth player said about important supporters:

> My teachers are important. My class teacher and sports teacher are very interested in what I do. So they help me a lot. And if there is some classes that I miss, then they don't give me a hard time about it (Youth player).

General social skills. The club manager emphasized the importance of being able to learn from others' experiences, being able to listen and take advice which requires a certain humbleness: "The willingness and openness to learn from others' experiences [...] and to be open to new areas of development" (Manager of sports). A primary school coordinator finds social skills very important because these skills help the youth player build social relations in the different domains that they are part of more easily. Social skills are important to be able seek support and be supported by coaches and teammates.

It is clear from our data that "knowledge of individual communication preferences" and "listening skills", as communicative aspects of general social skills, were practiced and talked about before, during and after practice sessions, games and were also part of the regular discourse in the environment. However, observations established that important aspects such as "being able to handle social life and school", "socializing skills" and "utilizing coaches and experts" were a minor part of the discourse and rarely mentioned by others than the youth players themselves.

Discussion

The purpose of this study was to explore which psychosocial skills are important in a youth soccer academy and investigate how psychosocial skills are practiced in the environment. As outlined previously the findings revealed two important results that will be discussed: the categorization of explicit (being practiced and talked about) and implicit (indirectly practiced and rarely talked about) psychosocial skills and the differentiation between internal and interpersonal psychosocial skills.

The results showed a differentiation between explicit and implicit psychosocial skills which were related to the process (the regular activities and practice in the environment) and characteristics of the environment. Research indicates, that it is important that talent development environments know which psychosocial skills are important in academies and whether they are explicitly or implicitly taught (Martindale & Mortimer, 2011, Henriksen et al., 2010). Schein (1990) pointed out that a culture – in this instance, the academy and soccer environment in AGF – consists of three layers of visibility. In the present study the explicit and practiced psychosocial skills were observable as artifacts and espoused values (norms and ideologies) and were communicated on a frequent basis (Schein, 1990). The implicit and indirectly practiced psychosocial skills are "taken-for-granted, underlying, and usually unconscious assumptions" (Schein, 1990, p. 112) which comprise the core of the culture. However, Schein (1990) argue,

> Deeply held assumptions often start out historically as values but, as they stand the test of time, gradually come to be taken for granted and then take on the character of assumptions. They are no longer questioned and they become less and less open to discussion (Schein, 1990, p. 112).

Moreover, this study shows that when values take the character of assumptions they disappear as explicit and practiced learning goals and transform into implicit expectations and this result highlights that implicit psychosocial skills are gradually less and less practiced in the environment. In the following, we will argue that this cultural characteristic of the club is a crucial problem for the young soccer player's possibility to learn psychosocial skills necessary for a successful transition from prospect to professional player in the club's first eleven.

In combination with the distinction between explicit and implicit psychosocial skills and as outlined previously in table 2, the study revealed four different combinations of psychosocial skills: 1) internal implicit skills, 2) internal explicit skills, 3) interpersonal implicit skills and 4) interpersonal explicit skills. Especially category one and three are of importance due to the implicit nature

and the problems associated with psychosocial skills being "caught" instead of "taught" (Gould & Carson, 2008). The lack of explication of these psychosocial skills additionally represents a problem, as the young soccer players may not be aware of the implicit psychosocial skills (taken-for-granted, underlying, and unconscious assumptions) they have developed, and therefore, these skills may be less usable for their career. Furthermore, the environment may not be aware of teaching strategies encouraging the development of these skills in players who are not displaying the skills from the very start (Martindale & Mortimer, 2011).

An important characteristic in the case study were the participants' explicit focus on what they believe are the espoused values and thus important psychosocial skills to learn, especially "self awareness", "the ability to work hard", and "motivation". However, previous research (Van Yperen, 2009; Holt & Dunn, 2004) show that implicit psychosocial skills such as "managing performance and process outcomes" and "goal setting" (two of the mainly implicit internal psychosocial skills) and "utilize team skills" and "general social skills" (two of the mainly implicit interpersonal psychosocial skills) may be even more important psychosocial skills for the players in negotiating the transition to professional soccer and meeting future coaches and team mates outside the familiar environment at AGF. This point is clarified by what the professional players in the case study experienced as the pivotal psychosocial skills in their transition to professional soccer, namely "managing performance and process outcomes" (i.e. the ability to learn new skills; learning to handle adversity; dealing with pressure; staying focused despite setbacks and setting own goals), which is consistent with previous research regarding the pathway to elite performance (MacNamara et al., 2010; MacNamara, 2011). However, a number of these psychosocial skills were not talked about or taught to the youth players in any explicit way, and therefore it seems coincidental that the players are aware of the importance of developing and displaying these skills. Despite the need for these psychosocial skills they were only indirectly practiced and rarely talked about in the environment and on academy level, and thus constitute a frailty and challenging task in the culture.

Finally, as a result, and taking into account the professional players experience, these psychosocial skills – or more precisely: the lack of these skills – represent the almost unbridgeable "gap" (or glass ceiling) between academy level (youth soccer) and elite level (professional soccer), which is the most important transition in a young player's career (MacNamara et al., 2010; MacNamara, 2011; Van Yperen, 2009). Therefore it seems crucial that, coaches, environments and youth soccer academies are aware of the differences between discourse and practice of psychosocial skills on academy level, which psychosocial skills are relevant for success on academy level and which psychosocial skills are needed for career success and coping with transitions to professional soccer.

Conclusions

The current study demonstrates the interweaving of adolescent athletes psychosocial skills and the talent development environment, and thus underlines the social construction of psychosocial skills in elite sport. This study shows that internal and interpersonal psychosocial skills are equally important for the soccer players in the case study. However, very few interpersonal psychosocial skills are explicit and practiced in the environment, whereas more internal psychosocial skills are practiced, incorporated into the culture and part of the shared articulated discourse in the environment. This result may inspire practitioners to work explicitly with psychosocial skills in relation to the sporting environment in which they are developed. Although this case study is unique, i.e. based on Danish culture and a specific sporting environment, the aim to explore and identify explicit and implicit psychosocial skills may provide inspiration for those involved in talent development environments across cultures and especially in teaching adolescents to cope with transitions. The distinction between and the awareness of explicit and implicit psychosocial skills in specific environments may provide a tool for optimizing talent development and soccer environments in Denmark and other countries.

Endnotes:

[1] For further information about ESAA visit: http://www.esaa.dk/content/english

[2] Arrangements for anonymity are accepted by the club and the participants.

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Successful Talent Development in Soccer: The Characteristics of the Environment

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The holistic ecological approach to research in talent development in sport highlights the central role of the overall environment, as it affects an athlete in his or her athletic development. Applying the holistic ecological approach, this article examines talent development among male under-17 soccer players in a Danish soccer club with a history of successfully developing several of its juniors to top-level soccer players. Principal methods of data collection include interviews, participant observations of daily life in the environment, and analysis of documents. The environment was centered around the relationship between players and a staff of coaches, assistants, and managers that helped the players to focus on: A holistic lifestyle, handling dual careers (sport and school), developing the ability to work hard, and being self-aware and responsible for their own training. Furthermore, the environment was characterized by a strong, open, and cohesive organizational culture based on integrated values concerned with the balance of the player's daily lives in school and sport. We argue that the holistic ecological approach opens new avenues and holds the potential to inspire coaches and practitioners to be sensitive to and analyze not only the individual player's athletic development but also the overall strategies and organizational settings, in the talent development environment.

Keywords: athletic talent development environment, career transition, group and interpersonal processes, talent development, football

Given the changing requirements encountered along the path to professional soccer (i.e., football), it is important to understand the challenges that young soccer players face at different stages of development and equip them with resources that will optimize their ability to cope with difficult transitions during their career (MacNamara, 2011). The responsibility of equipping players with adequate resources lies in the talent development environment, and not in one specific person or institution (i.e., the individual athlete or club). In this article, we will provide insights into the talent development environment that surrounds male under-17 soccer players in their endeavors to become top-level soccer players. Successful talent development environments in sport are defined as teams or clubs that manage to continually produce top-level athletes on the basis of their junior athletes, and provides them with resources for coping with future transitions (Alfermann & Stambulova, 2007). Resources for coping are sport-specific skills as well as "holistic skills" (i.e., a broader set of psychosocial skills that help the athletes handle dual careers and in general develop as a person) that ease the

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often stressful transitions to senior level, and facilitate the entrance to professional sport (Larsen, Alfermann, & Christensen, 2012; Martindale & Mortimer, 2011). According to ecological psychology, such as Bronfenbrenner's (1979, 2005) bio-ecological model of human development, these important skills evolve through the person's embeddedness in an environment that, consequently, affects his or her development.

Recently, there have been calls to integrate an ecological perspective in talent-development research (Araujo & Davids, 2009; Garcia Bengoechea, 2002; Krebs, 2009). Although these authors aptly demonstrate the potential contribution of ecological theory to research and practice in talent development, only a few empirical studies have so far investigated how sport environments support the development of talented athletes. In an effort to transform the ecological perspective into a manageable framework and methodology in talent research, Henriksen, Stambulova, and Roessler (2010a) have introduced the holistic ecological approach, with a focus on the environment in which athletes develop. Such an environment is called an athletic talent development environment (ATDE) and is defined as:

> . . . a dynamic system comprising (a) an athlete's immediate surroundings at the microlevel where athletic and personal development take place, (b) the interrelations between these surroundings, (c) at the macrolevel, the larger context in which these surroundings are embedded, and (d) the organizational culture of the sports club or team, which is an integrative factor of the ATDE's effectiveness in helping young talented athletes to develop into senior elite athletes (Henriksen, 2010 p. 160).

From this research Henriksen (2010) additionally identified eight common characteristics or features of successful ATDEs and their descriptors (p. 157–158). However, until now the ecologically inspired research on talent development has focused on individual sports. Applying a holistic ecological approach, the present study explores the dynamics and interactions between players, coaches, and other significant participants in a successful talent development environment in soccer. The objectives of the study are to (a) provide a holistic description of a successful ATDE in a team sport (i.e., soccer), namely AGF soccer club in Denmark; (b) examine factors influencing the environment's success in developing future elite players (i.e., professional players); and (c) analyze if and in what ways the eight features of a successful ATDE are present in the environment. We will focus the exploration of the environment to the microenvironment, because the eight features mainly concern the microenvironment, and the microenvironment in this soccer club is relatively large compared with previous studies of successful environments in individual sports, based on the propagation of soccer as a sport in Denmark and the rest of Europe.

Theoretical Framework

As a result of our aims for this study, the theoretical point of departure is the holistic ecological approach, represented by two working models developed by Henriksen, Stambulova, and Roessler (2010a, 2010b, 2011). The first model, the ATDE working model, is based on Bronfenbrenner's (1979, 2005) bio-ecological model of human development and is a framework for describing a particular athletic environment and for clarifying the roles and functions of the different components and relations within the environment. The environment is depicted as a series of nested structures. The young athletes and their closest group of people in the sport environment appear at the center of the model, and other components of the ATDE are structured into micro and macro levels and athletic and nonathletic domains within the two levels. The second model, the environment success factors (ESF) working model, is based on the organizational psychology of Schein (1990) and centers on the emergence of the organizational culture in the environment. According to Schein, "culture is what a group learns over a period of time as that group solves its problems of survival in an external environment and its problems in internal integration" (Schein, 1990, p. 111). Internal integration is used to create unity among the group members with respect to the values of the organization, whereas external adaptation refers to the culture's necessary adaptation to its surroundings. Schein pointed out that a culture—in this instance, a soccer culture—consists of three levels with various degrees of visibility: (1) cultural artifacts are visible manifestations such as stories and myths

told in the environment, clothing, buildings, and organization charts, (2) espoused values are the social principles, norms, goals, and standards that the organization shows to the world (i.e., what the participants say they do), and (3) basic assumptions, which are underlying reasons for actions, comprise the core of the culture and are no longer questioned but are "taken-for-granted, underlying, and usually unconscious assumptions" (Schein, 1990, p. 112) strongly affecting what the members actually do. The second model supplements the first by structuring factors that provide the environment's success and thus has an explanatory potential. The model takes as its starting point the preconditions provided by the environment and in the daily processes and routines among the participants in the environment. The preconditions and processes have three outcomes: The athletes' individual development and achievements of various skills, team development and achievements, and organizational development and culture. All of these are highly interrelated and influence the environment's success.

The results of the studies, which produced the two working models (Henriksen, 2010), suggest that successful ATDEs (at least within individual sport in a fairly similar cultural setting such as Scandinavia) share a number of features that may explain the environment's success in developing talented athletes: (1) training groups with supportive relationships, (2) proximal role models, (3) support of sporting goals by the wider environment, (4) support for the development of psychosocial skills, (5) training that allows for diversification, (6) focus on long-term development, (7) strong and coherent organizational culture, and (8) integrations of efforts (for a comprehensive description of the eight features and their opposite poles see Henriksen, 2010, pp. 157–158).

The above list of features is comparable with Martindale and colleagues' (2005; Martindale, Collins, & Abraham, 2007) suggestions concerning effective talent development environments in a British context. They suggested that effective talent development environments are characterized by (1) a clarity and consistency of philosophy, objectives, and methods, which includes that aims and methods must be long term and coherent; (2) wide ranging and coherent messages and support, which includes that links to the senior level must be clear and that communications with outside influences such as parents are promoted; (3) systems facilitating the promotion of player development, which includes the promotion of flexible programs to suit the individual athlete and a focus on developing ownership, autonomy, motivation, and goal-setting skills in the athletes; and (4) an emphasis on age-appropriate development rather than age group success.

Both lists of features provide suggestions as to what is important in designing successful talent development environments in sport in general. The research by Henriksen et al. (2010a, 2010b, 2011) have so far not investigated successful talent development environments in soccer; however, a recent athlete development study in the United Kingdom by Taylor and Bruner (2012) examined the social environment and developmental experiences in elite youth soccer. Soccer is the world's biggest sport, and talent development in soccer is characterized by an intensified professionalization (Roderick, 2006), totalization (Heinilä, 1982), and globalization (Maguire & Stead, 1998). The spin-offs of these trends include the attempt to single out and sign professional contracts with talented soccer players at an ever-earlier age. The price of skilled soccer players continues to rise, which explains in part the particular attraction of developing players with a view to selling them or to create rising stars in clubs that invest in talent development. These conditions most likely have a particular influence on the clubs' talent-development strategy (e.g., focus on physical maturity instead of potential), and therefore, the young talented players' transition to professional soccer (Christensen & Soerensen, 2009; MacNamara, Button, & Collins, 2010; Relvas, Littlewood, Nesti, Gilbourne, & Richardson, 2010).

Method

The study was organized as an explorative integrative and qualitatively oriented case study in a successful Danish soccer environment. A case study aims to develop a deep understanding of the holistic and meaningful characteristics of real-life events, persons, or contexts (Yin, 2009). Kruuse (2008) argues that case studies are meaningful if complex phenomena are the subject of investigation, and Yin (2009) further highlights the case study as a relevant

strategy when researching "the natural occurring experiments" (p. 4) that are beyond our control. Because our objective was to describe a specific successful environment and understand its success, we found the case study was an appropriate methodological choice for this study.

The Case Study and Case Selection

The case study is a research strategy rather than a specific method. The case study is always bounded. It is a strategy to empirically explore chosen contemporary phenomena in their naturalistic context by using multiple sources of evidence that are used to build an argument (Robson, 2002; Maaloe, 2004). The case study approach recognizes the role of the researcher as coconstructor of reality that is studied.

The case study has been critiqued as an unscientific (biased) research method that does not provide a basis for generalization and therefore is irrelevant in the social sciences (Flyvbjerg, 2006). However, in correcting five central misunderstandings about case studies, Flyvbjerg also presents support for choosing the case study in the present study. A first point regards the nature of human learning. Whereas beginners follow rule-based formula and rationality, true experts act more fluidly based on tacit knowledge (Dreyfus & Dreyfus, 1986). Context-dependent knowledge derived from experience with discrete cases is "necessary to allow people to develop from rule-based beginners to virtuoso experts" (Flyvbjerg, 2006, p. 221). We therefore argue that although the present case may not provide context-independent rules and guidelines to be followed across time and domains, it will provide practitioners in the field of talent development with an example from which to learn.

A second critique of case studies that is relevant to the present study states that case studies cannot provide a basis for generalization. Flyvbjerg argues that case studies do play a role in theory building as well as theory testing, and that "the strategic choice of case may greatly add to the generalizability of a case study" (p. 226). We used an information-oriented case selection method, that is, we selected a case that we expected to be high in information content. Because the present case study only provides a snapshot of the environment (not a longitudinal approach), we selected a club renowned for a consolidated organizational culture and structure. More specifically, we selected one of the oldest and most successful Danish soccer clubs (AGF) and its affiliated players, staff, and nearby environment for the case study. We partly consider this a "paradigmatic case selection," as the case was selected with the aim "to maximize the utility of information from small samples and single case [and] to develop a metaphor or establish a school for the domain that the case concerns" (Flyvbjerg, 2006, p. 230). However, we also acknowledge that it is partly an opportunistic case, as the club was open to the research project and therefore provided a good opportunity for an in-depth study. Finally, in researching one case, we do not aim for a statistical generalization, but rather for an analytical generalization. More specifically, we aim for the present case study to enrich our understanding or theory about successful ATDEs.

A last critique relevant in the present setting is that case studies contain more bias toward verification (confirming the researchers' preconceived notions) than other research. On the contrary, Flyvbjerg (2006) argues that when reading case studies "it is falsification, not verification, that characterizes the case study" (p. 235) because the case is likely to "talk back." Tracy (2010) denotes sincerity as a quality criterion of qualitative research, which involves "honesty and transparency about the researcher's biases, goals, and foibles" (p. 841). In the present study, we built on previous studies of talent development environments. At the same time, however, we had a hypothesis that an ATDE in soccer would be remarkably different from one in the individual sports that previous research had primarily investigated. Also, the principal researcher read the previous research not to replicate its findings but to become aware of his preconceived notions (as a researcher and trained footballer) in order for him *not* to be seduced by them. Along a similar vein, we argue that as a first in-depth investigation of a youth soccer academy, the present study has a *worthy topic*, which according to Tracy (2010) is another of eight universal criteria for judging the quality of qualitative research.

Description of the Case

Aarhus is the second largest city in Denmark, and it has one of the highest concentrations of talented and elite athletes in Denmark. The club is part of ESAA (Elite Sport Academy Aarhus), which is an institutional setup that provides young talented athletes with the opportunity to combine an educational career with an elite sports career. ESAA is based on a partnership model with the local elite sport clubs, local educational institutions, and the national sport federations. At the time of the study, ESAA cooperated with 15 different sports and >350 athletes, 2 primary schools, 9 secondary schools (gymnasium and vocational), and the University of Aarhus. Contact was made with the sports director of ESAA with a view to qualifying the case selection. The director approved the choice of the club, and in cooperation with him, preliminary acceptance was gained through the sport manager and coaches. We offered full anonymity, but the club did not accept this. Rather, it was agreed that the identity of the club would be open, whereas identities of individual players and others would remain concealed in the presentation of the findings.

The club consists of two departments: A volunteer nonelite department for a wide range of soccer players, and a professional elite department for male youth teams ranging from under-13 to under-19, plus senior teams. The club has full-time coaches for each youth team in the professional department. The professional senior team (founded in 1978) is organized into a section of its own and plays in the Danish Premier League. The senior team has a full-time first team coach, an assistant coach, and relevant experts supporting the team and staff. A team of coaches dictates the club's talent-development strategy. The club is a self-contained part of the largest sports club in Aarhus (Aarhus Gymnastics Association), which was founded in 1880 as a multidiscipline sports club. Soccer joined the program in 1902. The club is one of the most successful Danish soccer clubs, with five Danish championships and nine Cup titles (a record). In 2005, the professional soccer department joined the newly consolidated Aarhus Elite and expanded the business to other areas (professional handball, basketball, a stadium, and office buildings). AGF produced between 15 and 25 male youth national players from 2007 to 2009, and 7 of the 25 professional players are from the youth department of the club. This study focused on the under-17 team and its staff in the professional department.

Data Collection

Data were collected from multiple perspectives and mainly within the microenvironment, that is, school, peers, related teams, coaches, and players in the club. First, in an attempt to achieve contextual sensitivity, participant observation (Spradley, 1980) was used as the primary data collection method in the case study. Participant observation is a good strategy in scientific studies of social relations (Tanggaard, 2006), because it enables in situ observations of the social practices under study. Listening to the myths and stories, watching rites, customs and traditions, and seeing building logos and styles of clothing (cultural artifacts), gives the researcher an impression of how the environment creates and maintains its culture. Also, participant observation allows the researcher to follow the subjects across several contexts. The observations were performed by the principal researcher as a "moderate participant" (Spradley, 1980, p. 60). He is an educated PE teacher and a trained soccer player, and we assumed that these qualities would enhance the possibility of him being a successful moderate participant in the chosen environment. As a moderate participant, he would maintain his role as a researcher while simultaneously helping out. More specifically, he observed day-to-day training, and acted as an assistant coach and sparring partner for the under-17 coach for 21 days during 7 months (170 hr in total). He observed training, matches, meetings of the coaching staff, and social events among the players. The principal researcher had to be aware of the social reality and the perception of the reality by the participants (Olesen, 2001). Interpretations of actions, relations between the parts of the environment, and the interests in the environment were main foci. Therefore, the observations were based on real time and in real-life contexts. The challenge was to be aware of and confront the straightforward perceptions and the apparent perceptions as they were shown in everyday actions in the environment. During the observations, the principal researcher took descriptive field notes to capture different perspectives and variation in the information of the participants (Patton, 2002).

Second, the principal researcher conducted 15 individual interviews, which lasted between 40 and 90 min. All interviewees are connected to the microenvironment and include two managers, three coaches, four youth players, two professional players, three school and sport coordinators, and one consultant form the municipality. The interviews were semistructured (Kvale & Brinkmann, 2009), which allowed the interviewees freedom to discuss issues that were personally important to them. Within the semistructured format, open-ended questions were used to yield in-depth responses about the interviewees' experiences, perceptions, and knowledge about the environment. Using the semistructured approach, the principal researcher had questions on a schedule (derived from the ATDE and ESF working models), but was guided by the schedule rather than dictated by it (Patton, 2002). Separate guides were created to reflect the different perspectives of the interviewees. Young athletes were asked about the microenvironment, daily life, and characteristic stories from the environment. Coaches were interviewed to find out how they ensure that the immediate environment is conducive to the talent-development process, how they assess its effect on the prospective elite athletes, and what is done to optimize this. Club administrators offered insights into the larger environmental system in which the club is embedded (such as club values, macro environmental influences, historic dimensions, and resources). Interview guides are available from the corresponding author on request.

Finally, archives and documents were used as a substantial category of data in the case study (Ramian, 2007). The documents included were newspaper articles involving talent development in the club, the homepage of the club, training plans, season plans, their calendar, internal information about talent development, match evaluations, match statistics, documents from the municipality involving sport and school, yearly reports from the municipality, and the club's code of conduct. Although we realize these documents do not represent a true reflection of reality, they are, however, important artifacts in the culture and helped us grasp how the environment understands itself. The documents were compared with interviews and observations in order to understand important features in the environment.

Data Analysis

Our overall approach to the case analysis was the explorative integration, which is "a cyclic approach of a continuous dialogue between prechosen theories, generated data, our interpretation, and feedback from our informants, which will hopefully lead to more inclusive theory building or even understanding" (Maaloe, 2004, pp. 8). This entails that data collection and analysis are intertwined.

The interviews were audio recorded and transcribed verbatim. Transcriptions were subsequently sent to the participants for verification. Full anonymity was guaranteed to the participants in the study. The data analysis was based on an abductive strategy (Dubois & Gadde, 2002; Chamberlain, 2006) and consisted of two steps using Nvivo 8 coding software. The first step consisted of a deductive categorization of data (Kvale & Brinkmann, 2009, p. 201) to describe the environment by means of the ATDE model. This analysis resulted in an empirical version of the ATDE model that aims at describing the talent development environment of AGF soccer club. Whereas the overall nodes were derived deductively from the working models (e.g., micro- and macroenvironment), sub nodes and the content of each node were derived from data. The second step was a theoretical reading (Kvale & Brinkmann, 2009, p. 238) of data with the purpose of generating explanatory themes in ESF working model. This analysis resulted in an empirical version of the ESF model that aims at explaining the talent-development success of AGF soccer club. Particularly in terms of the team's organizational culture, which consists among other of basic assumptions that are outside the members' consciousness, the analysis was interpretive. These two steps of the analysis were systematically combined as described by Dubois and Gadde (2002, p. 554). To describe the complexity and details of the interaction in the environment, the aim of presentation of data "is an in-depth picture of the case using narratives" (Creswell, 2012, p. 191) and a "thick description" of the specific environment as a means to achieve credibility (Tracy, 2010). Accordingly, the following presentation of data and empirical models is a combination of interviews, observations, and analysis of documents, which as a

whole should provide an in-depth and thick description of AGF soccer club.

Ongoing member reflections took place during the study. Unlike a member check, member reflections go "far beyond the goal of ensuring that the researcher got it right . . . [and] are less a test of research, as they are an opportunity for *collaboration* and reflexive *elaboration*" (Tracy, 2010, p. 844). All participants were offered to read the transcripts of their interviews. The coaches and manager received a full written copy of the researcher's analysis and interpretations, which they discussed with the principal researcher. In this cooperation, learning from the environments reactions to the portrait gave new insights. Peer validity (Kvale & Brinkmann, 2009) was obtained through collaboration with the coauthors to establish the accuracy of the interpretations. The triangulation of data sources and data-collection techniques helped to establish the trustworthiness of the analysis and findings (Patton, 2002).

Findings

Description of AGF Soccer Club as a Talent Development Environment

This study focused on the male under-17 team (22 players) and its staff in the professional department. These two groups are the natural point of departure in the description of the empirical ATDE model of AGF (see Figure 1). Bearing in mind that all the components of the environment are interconnected and affect one another, the model depicts the most important components and relationships as well as the structure of the environment. The thickness of

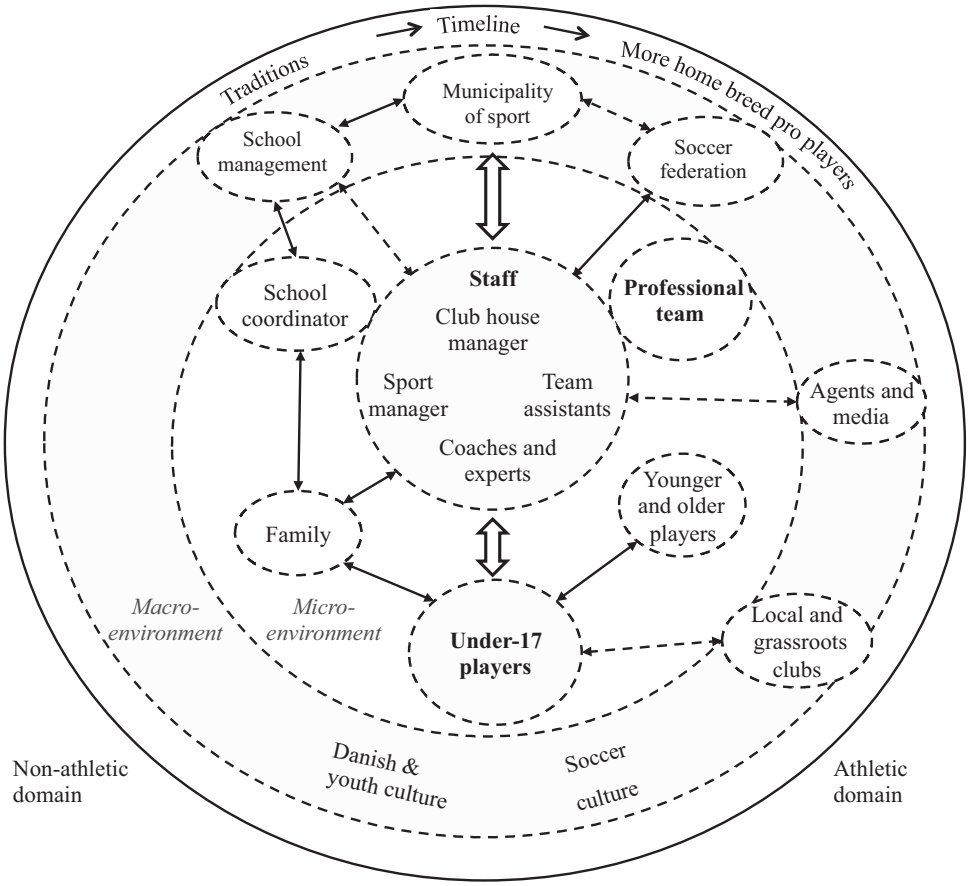

Figure 1. The ATDE empirical model of the AGF soccer club.

the arrows corresponds to the closeness of the relationship.

At the center of the model are the close and most important relationships between the under-17 players and the staff.

The staff included the club house manager; youth coaches for the under-13, under-15, under-17, and under-19 teams; sport manager; and team assistants (all round assistants handling the laundry, practical work before and after training sessions and matches, and social and emotional support). The under-17 coach handled communication between the under-17 players and the staff and had sole responsibility for development and performance of the players. The staff played a vital part in the exchange of knowledge in the environment. The daily praxis of the staff was founded on informal discourse, but once a week, there was a formal coach meeting including the talent manager and sport manager, wherein relevant knowledge regarding status of talent development, performance, and results was shared and discussed. A familiar atmosphere and holistic approach permeated and dictated the way the staff worked with the players. The players saw the coaches every day for informal talks, and the office was literally always open. The coaches shared knowledge on a regular basis regarding recruitment and tryouts of new players from local clubs or grassroots clubs (clubs that are in cooperation with the club), injuries, development plans, lack of development, and poor or good performances. The following observation exemplifies the familiar atmosphere we met in the environment.

It was one of my first days in the club. I showed up in good time for an away game, so I would not be late. The team assistants were already at the club and were in the process of getting ready to pack the bus, which had not yet arrived. While I stood there by myself, the players and coaches arrived. The players arrived by bike or were delivered by their parents by car. The parents got out of the car and greeted and shook hands with the team assistants and coaches. Despite not having seen me before, the parents and players came over to me and shook my hand. On our way to the game and as part of the tradition for away games, the bus made a stop at a lay by/picnic area after a couple of hours on the road. The oldest team assistant brought bread, butter, and chocolate spread to a nearby table and started serving the youth players. The oldest team assistant stood at one end of the table, talking and directing in a firm, but relaxed, manner, and the players lined up, as always, for their "breakfast" (Observations material).

Each and every person that was interviewed told us, and all the observation data show that the relationships between the youth players were immensely important. The under-17 players spent a great deal of their time together. After school, they went directly to the club and arrived 2 h before training sessions. The club house was their second home, and there they socialized, shared experiences, relaxed, did homework, and played "x-box games," socializing across different teams and age groups. This informal exchange of experience and knowledge strengthened relations, created stronger bonds, and facilitated the under-17 players' transition to the under-19 age group, as a player related:

Some weekends I just come here to watch soccer and talk to some people on the team (ed. under-17 players). That is what I find important [. . .] and it is fantastic that we always have the opportunity (ed. to go to the club) because it creates a unity among and across age groups (Youth player).

All under-17 players had the ambition to play professional soccer and were dreaming of a spot and wanted to play on the professional team in the club. Despite the strategy for and ambition of the players to go to professional level, there were no actual relationships with the professional players. The professional team members were distal role models for the players, in the sense that the players "saw" them every day but exchanged no knowledge of development with members of the professional team. Common for all players was the fact that they relied on the parents' practical and financial support.

The school was a central part of the player's lives. The under-17 coach handled information with the school coordinator regarding practical issues that affected participation in the school (e.g., travels with the club, missing lessons). There was a shared perception by the club and school that school and soccer were equally important. If a player deliberately missed school then the player was not allowed to participate in training sessions at the club. The teachers attempted to adjust homework and the everyday

routines in the class to fit the needs of the players (student-athletes), for example, by letting them eat during a class or arranging extra classes with teachers in subjects that the player had missed owing to, for instance, training camps. A player described the demands and the communication between school, club, and the family:

It is definitely a demand that we care for school. If we got a lot of homework then we do not train. There is a shared understanding (ed. between school and club). And regarding parents, we get information and letters for them to read about what we do. They (ed. the school) provide good information for our parents. The coaches are also good at talking to them (ed. parents) (Youth player).

The players had some friends in school who were not involved in sports, but generally the challenges of handling dual careers (school and soccer) provided limited time to socialize with friends outside of soccer. The players highlighted that such groups of friends were considered to be important for their social identify, but organizationally demanding, and they attended activities less frequently and rarely participated in parties.

Identification of Environment Success Factors in AGF Soccer Club

The empirical version of the ESF model (see Figure 2) summarizes the factors influencing the success of AGF soccer club as an ATDE. Below, we present major factors related to preconditions, process, and organizational culture of the club followed by their effects on the players' individual development and achievements, as well as the club's effectiveness.

Preconditions. The coaches and managers in both micro- and macroenvironment regarded the geographical position of the club as a huge resource. Aarhus is Denmark's second largest city with 300,000 inhabitants, it has a large surrounding rural area with lots of smaller soccer clubs, which a coach described as "a huge source of recruitment," and the club has limited

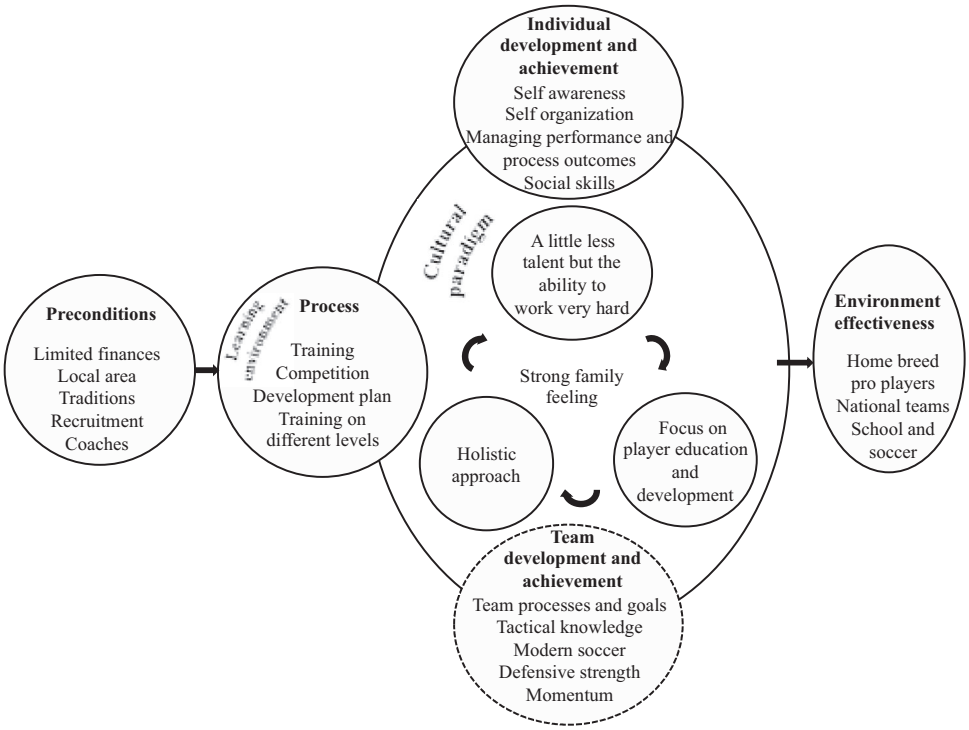

Figure 2. The ESF empirical model of the AGF soccer club.

or no competition with regards to elite soccer in a radius of 40 km.

The club had average financial preconditions compared with other soccer clubs in Denmark, an old clubhouse from 1941 with no opportunity to expand the facilities and few pitches. One of the players described that despite these poor conditions, this did not seem to be an issue for the players: "There is not that much focus on facilities and it really is not new here. We do not have any fancy and expensive stuff, and it is not necessary. It is only hard work" (Youth player).

Besides the daily development of players and ESAA (macroenvironment), recruitment of players from the rural area of Aarhus and other countries (i.e., Iceland and Georgia) was essential for having a high standard in the youth elite department. In essence, the preconditions for success were a dynamic relation to developing youth teams with a balance between inexperienced and experienced players, based on local players but supplemented by foreign players for creating a pipeline, across age groups, for the professional team.

Process. Entry to the clubs' talented teams started at the age of 13, and most of the players joined the club from local teams and grassroots clubs. Players (and in some cases also their family) from foreign clubs usually moved to the town at the age 17. Entry to the talented under-15 and under-17 teams meant specialization and intensive investment in soccer, and the discontinuation of other sports or interests. Training in the club consisted of five to six sessions of regular training a week, match evaluations, strength training in the gym, and position-specific training where defenders, midfielders, and strikers trained across age groups.

The training sessions were in general high on informative and motivational feedback and dialogue. In most cases during the session, the coach conducted individual talks to create understanding and awareness of new areas of development. There was a strong focus on learning and, besides talks on the pitch, each player has an individual development plan, which is discussed during two annual meetings and followed up before, during, and after training sessions. The club highlighted a learning environment in which the players strived to develop, worked hard each day, and trained with players below, at the same level, and above their ability each week. The talent manager related that the players are dependent on each other as: Their teammates are essential for learning and keeping a high level of quality during training sessions and in addition explained the strategy of developing players from a young age:

From the age of 12, we start to select players to educate them well (ed. in soccer). In the long run, we have to start early to be able to educate a lot of players ourselves. And then you are able to get outside players to supplement. All in all, we have to have players with super skills, and that is a long process (Talent manager).

A practical issue and focus area of the club was to ease the transport burden on players coming from the outer local area. Consequently, transportation was arranged so that each day a coach from the staff picked up under-15 and under-17 players from as far as 40 km from the club. In this way, the club seemed to recognize its responsibility to create optimal learning environments and training conditions for the young players—not only on the pitch but also in terms of acknowledging these young players' living conditions when they live in their parents' household.

Cultural Paradigm

In the old club house, the physical manifestations of old legends, great wins, important matches, and trophies were visible in the halls, cafeteria, and tactical room. In accordance, appropriate behaviors and values were publicly displayed in documents and in the locker rooms. The environment was inspired by the English Football Association and highlighted values such as passionate players living and playing with passion and being proud of and believing in what they do; committed players demonstrating joy and courage with the "right" attitude, that is, demonstrating involvement, concentration, focus, and readiness in all tasks; accountable players vouching for their own actions and agreeing to act in conformity with the club and team standards; and respectful players demonstrating tolerance, acceptance, and understanding of differences, regardless of status, attributes, and skills. The values were part of the discourse in the club and players and coaches regularly talked about the values and how to

respect them on and off the pitch. The analysis revealed that the club and players were characterized by a culture consisting of four interconnected basic assumptions.

Strong family feeling. The first assumption and fundamental governing principle was a strong family feeling associated with openness, cooperation, humbleness, and professionalism by the members of the environment and the core of the group's cultural paradigm. New and old members in the environment as well as outsiders narrated this assumption. The following quotes are presented to highlight the strong family feeling depicted in the environment. A professional player that recently joined the club said "It's more of a humble environment. I think it's still a very professional environment [. . .] it is homely" (Professional player). The sport manager told a story about a visiting foreign family: "We were visited by an Icelandic family, and then the father of the player says, 'It seems that you are one big family [. . .] after just having been there for 30 min' (Sport manager). In essence, a player described that the basis of the club was passion, and despite the high expectations and demands experienced every day, once you were in the club, you were taken care of. Another player related in identical soccer terms: "It is the AGF-team spirit. It is about standing up for your teammates. If the opponent dribbles your teammate, there is always one behind him" (Youth player).

A little less talent but the ability to work very hard. This second assumption was reflected in the approach to long-term talent development. The path to being a professional is simply to hard work, and there was a deeply rooted as well as explicit discourse and understanding in the environment, narrated over and over again; if the players are willing to work very hard they will probably reach the professional level. One of the stories about this assumption was based on three approaches to talent development, as a coach related about talent and hard work:

First, we have the players that do not have talent and do not work hard; we do not bother to select them. Second, there are players with a huge talent but do not work hard, we do not bother to work with them either and finally there are players with a little less talent and the ability to work very hard. Those are the ones that we want to work with (Youth coach).

Focus on player education and development. Closely linked to this was the third assumption: Focus on player education and development. This assumption was related to the overall goal of developing players for the professional team. On one hand, the club was highly focused on the art of educating and developing players, but on the other hand, the players needed to know how to win, as described by the talent manager:

It's a balance between development and results. And we cannot end up focusing solely on development and we cannot end up focusing youth soccer merely on winning games. It is about winning and developing at the same time (Talent manager).

Holistic approach. The fourth and last assumption described the environment as a whole: A holistic approach in talent development. It was important that the players learned how to play soccer, but they needed to develop as people and handle both soccer and school.

Individual Development and Achievement

The players developed several characteristics that were helpful for them, both in sport and life. Analysis revealed that self-awareness, self-organization, goal setting, managing performance and process outcomes, and social skills were the main categories of individual development. All participants talked about the importance of self-awareness during practice and as a talented soccer player in general. When referring to self-organization, it was deemed crucial, by coaches, school coordinators, and the municipality, that youth players were able to structure daily activities and were able to multitask. As an upper-secondary school coordinator recounted: "They have to be able to use a calendar [. . .] arrange the day and make it work, [. . .] plan and be able to manage the pressure and stress in different situations" (Upper-secondary school coordinator). A player described the importance of being able to learn from mistakes and being ambitious about development and process outcomes: "You have to be able to forget mistakes if you want to play at a senior top level [. . .] You have to set high demands for yourself all the time" (Youth player). In general, the professional players, club manager, and pro-

fessional coach deemed it necessary to be "able to handle adversity," "learn from mistakes," and "deal with pressure" to make the transition to professional soccer; however, these psychosocial skills were only indirectly practiced and talked about by the under-17 players.

Team Development and Achievement

The players developed several characteristics that were helpful for team development and achievements. The players mainly focused on and learned about team processes and goals, tactical knowledge, modern soccer principles (e.g., being in possession of the ball, being well organized as a team), defensive strength, and psychological momentum. Analysis revealed that the team in a lower degree focused on characteristics such as "knowledge of team personalities," "utilizing team skills," "knowing team strengths and weaknesses," "utilizing team resources," and "teamwork skills." In our observations, we noticed that coaches and players spent most of their time on developing team tactics, and organization and the coaches were well aware of the process of educating intelligent and organized players, which was revealed during match preparations:

The coach spent some time putting sheets of paper on the walls an hour before the match. On the sheets of paper, different situations were sketched. At the tactical meeting, 45 min before the match, the different situations were discussed. It was not the coach that told them what to do; it was a dialogue in which the player, by choice, said what to do and how to handle offensive and defensive situations during the match (Observation material).

Besides tactical knowledge, psychological momentum was a small part of the training sessions. The players were integrated in decisions on how to handle adversity and how to handle and keep psychological momentum in transitions during matches.

Environment Effectiveness

The primary aspects of success were related to (1) how many of their own players were part of the professional team, (2) how many players were part of youth national teams, and (3) a successful combination of school and soccer.

The results of the two empirical models presented above (see Figure Figures 1 and 2) allow us to provide the following summary (Table 1) of the talent development environment in AGF soccer club.

Discussion

The purpose of the study was to provide a holistic description of AGF soccer club, to examine factors influencing the environment's success in developing future elite players, and to analyze if and in what ways the eight features of successful environments are present in the soccer club. In that regard, our study is contributing to the literature on career transitions of athletes. The athletes of our study are progressing from the developmental to the mastery phase (Salmela, 1994) or from the specializing to the investment years (Côté, Baker, & Abernethy, 2007). As emphasized by these and other developmental models of athletic careers (summarized in Alfermann & Stambulova, 2007), the transition from one stage to the next can be facilitated or hindered by internal and external (environmental) factors. Our study is particularly concerned with the external factors, which may become supportive in interaction with the athletes' prerequisites.

Although each successful ATDE is unique, the present study as compared with previous studies shows that the environments share a number of factors contributing to their success. First, a focus on the athletes' long-term education and development rather than their early success. This seems to corroborate the conclusions of the developmental model of sport participation (Côté et al., 2007) that elite performance may better be fostered by later specialization and by not exclusively focusing on early success. A second important factor of an ATDE is a strong and coherent organizational culture, where visible tokens of the culture such as values and mission statements and what people "said they did" and what they "actually did" corresponded.

Third, a governing principle in the culture was a strong family feeling. This family feeling is reflected in strong relationships between the members of the team, which are regarded as highly important by the soccer players. Bruner, Munroe-Chandler, and Spink (2008) found similar results in a qualitative study with 17-year-

Table 1
Features and Descriptors of AGF Soccer Club

Features of AGF soccer club	Descriptors
Training groups with supportive relations	The club provided opportunities for inclusion in a training community; supportive relationships and friendships within the group, and across age-groups (under-13, under-15, under-17, and under-19) despite performance level
Proximal role models	There were no proximal elite player role models but the club cafeteria functioned as an informal venue in which instructive relationships between the groups of prospects took place.
Support of sporting goals by the wider environment	The club provided opportunities to focus on the sport; school, family, friends, and others acknowledge and accept the players' dedication to sport
Support for the development of psychosocial skills	The club provided important psychosocial skills such as self-awareness, discipline, self-organization, management of process and performance and social skills
Training that allows for diversification	The club promoted early specialization and focus solely on developing sport-specific skills within soccer from age 13 and did not encourage prospects to sample from other sports
Focus on long-term development	The club focused on winning and acknowledged the players' long-term education and development
Strong and coherent organizational culture	The club was permeated by a strong family-oriented atmosphere based on openness and cooperation and strong connection between school and club, deeply rooted in a philosophy based on the ability to work very hard, a holistic approach and a long-term focus on player education and development
Integration of efforts	The club provided integrated efforts, which allowed prospects to experience a coordinated environment rather than feeling trapped between conflicting demands from parents, school, club coaches, national team coaches, and others

old elite male junior ice hockey players in Canada who had just made the transition into elite sport. Whereas somewhat >60% of their comments were related to performance issues, some 10% were emphasizing the supportive role of teammates, and another 10% of the comments were devoted to the subjective feeling of personal development and maturation due to sport.

Last but not least, the environment was based on cooperation, openness, and sharing knowledge. The environment furthermore developed players that recognize the need for a holistic lifestyle and develop psychosocial skills and competencies for life rather than just sport-specific skills. In line with these results, Martindale et al. (2005) highlight similar characteristics of successful environments including a clarity and consistency of philosophy, objectives, and methods, which includes that aims and methods must be long term and coherent.

Despite AGF soccer club being a successful environment, there are some characteristics that are in contrast to previous successful environments, which could highlight some inherent pivotal problems in soccer.

Barriers for Successful Transition From Youth to Professional Players

One pivotal problem is the lack of proximal role models and communication, which is nonexistent in the transition from youth to professional in AGF soccer club and maybe soccer in general. While being a "gap" in the talent development environment in AGF soccer club, previous studies show that coaches from other successful environments encouraged players to occasionally train with groups at a higher level (Christensen, Laursen, & Soerensen, 2011), which may ease their transition and prevent a kind of "cultural shock" when reaching the elite level (Henriksen et al., 2010a). In the present study, the transition could be a cultural shock and therefore represent a challenge and an unfortunate basic assumption associated with the transition in AGF soccer club. A consequence could be that the family feeling between player and club in itself makes it feasible for the youth to make a smooth transition to the professional level. However, this might not be enough; coaches have a particular responsibility for

helping athletes with their transition. Besides teaching performance-related physical, technical, and tactical skills, coaches should moreover give enough opportunities for positive experiences and enjoyment and for building positive self-worth, as was the case in AGF. Also, athletes should be educated in how to keep control over their activity and investment in elite sport (Bruner, Strachan, & Côté, 2011).

Another pivotal problem is that the young soccer players may not be aware of what is needed, which subsequently means relying on important coping skills being "caught" instead of "taught" (Gould & Carson, 2008). The lack of explication could furthermore affect the process and outcomes of a transition, specifically the interaction of: Situation, self, support, and strategies (Alfermann & Stambulova, 2007). Strategies to cope with a transition are key elements, and the other three can be seen as factors influencing coping. However, strategies are associated with information seeking and action (Alfermann & Stambulova, 2007), but the lack of communication and proximity, as described in Figure 1, provides no obvious support from the environment (i.e., coaches, managers, elite athletes) to cope with the transition and therefore makes the transition more difficult than needed, although previously highlighted as pivotal for other ATDEs in Scandinavia and Britain (Henriksen et al., 2011; Martindale et al., 2005, 2007).

Organizational Barriers Between Youth and Professional Department

The organizational structures (i.e., the formal as well as informal of junior and professional teams) make it hard for youth players to grasp the cultural paradigm (what they say and do) in the professional department in AGF soccer club. Previous research of organizational structures in 26 elite soccer clubs across five European countries equally reveals that there is a lack of proximity and formal communication between the youth and the professional environment, regardless of structure across Europe, which led to staff dissatisfaction and appears to hinder the coherent progression of young players into the professional environment (Relvas et al., 2010). According to Woodman and Hardy (2001), the efficiency of an organization is directly associated with clear communication and role clarification, and the decision-making structure must develop a sound, robust, and clear communication system. However, it seems that across Europe, professional soccer and youth soccer are two distinct departments appearing to operate at the same hierarchical level (i.e., the first team is not responsible for the youth department). The same tendency is evident in AGF. On a daily basis, it means that the professional department assumes priority role, with both the strategic apex and sports director (i.e., sport manager) cohabiting within the professional environment. Additionally, Relvas et al. (2010) reveal that in other cases, the organizational structure seems to be associated with a formal distance between the two distinct soccer departments and independently of structure type (and/or location), creating a "distance" between the first team and youth environment. This distance could be described as either physical (i.e., two distinct training facilities), cultural (i.e., distinct operational practices) or both. The predominant rationale for this was the perceived requirement to "protect" the first team players and to stimulate/motivate the youth players to "fight" to enter into a professional environment (Relvas et al., 2010). The implicit logic of this rationale seems to be that youth players should be able to figure out the transition demands to the professional team by themselves, and that the youth players could damage the first team players by talking to them or seeing them on a daily basis. This is, by the way, not the case in other sports (Henriksen et al., 2010a).

In the case of AGF, the taken-for-granted assumption could be that the familiar atmosphere between the player and the club makes him a part of the first team and so he unnoticeably would just need to glide from junior to first team. But this assumption is far from reality. Therefore, the lack of explicitness makes it more difficult for youth players to make the transition, basically because expectations and demands are not openly communicated and because of the physical distance, required for protection of first team players.

The Importance of Team Development and Achievement

The category of team achievements is part of the ESF working model. However, as the stud-

ies by Henriksen et al. (2010a, 2010b, 2011) all investigated individual sports, this category was never fully unfolded and never found its way into their empirical models. Furthermore, the category is referred to by the authors as "team achievements" and "team achievements and development" interchangeably. In the present study, we describe the category as "team development and achievement," thereby highlighting that development is the prime focus and achievement a result of long-term development.

The participants in AGF highlighted team processes and goals, tactical knowledge, modern soccer, defensive strength, and momentum as important for team achievement and development. The team worked with its own weaknesses and strengths and practiced awareness of psychological momentum (on and off the pitch) that prepared players tactically, technically, physically, and mentally to build confidence and handle personal and situational game events (Jones & Harwood, 2008). Although the under-17 coach and the players alike emphasized that team development and achievements were important, they were not able to specifically describe aspects of team development and achievement that were different from common sport-specific soccer skills (i.e., defensive strength or tactical knowledge). It is noteworthy, that in comparison with individual achievement and organizational culture, the team development and achievement category was implicit in nature whereas the participants in AGF talked more straightforwardly about the individual skills and the organizational culture of the club. They spoke about general (and unspecific) structures of team development and achievement, but were not able to describe in detail aspects of group dynamics or team cohesion or if they worked with these areas of development, which are highly relevant for team performance (Carron, Hausenblas, & Eys, 2005). This could suggest that AGF's overall aim of developing individual youth players for the professional team shifts the perspective from team psychological skills toward the "skill package" (Martindale & Mortimer, 2011) of the individual player and the culture in the club. Comparing organizational culture with team development and achievement, it seems that besides sport-specific skills, the culture (i.e., hard work, family feeling, cooporation and openness) in the environment supplements and regulates important functions for the team and thus explains why the team development and achievement category are dominated by sport-specific skills related to soccer performance in AGF soccer club.

This study provided support for recent research findings in the area of talent development in sport as well as for the applicability of the holistic ecological approach in studying and working in and with the environment in soccer. The present study of AGF soccer club complements previous studies of individual sports, and provides important insight into the way in which holistic ecological analyses of talent development in a team sport may be carried out.

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Preparing footballers for the next step: An intervention program from an ecological perspective

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Abstract

The purpose of this article is to present practitioners and applied researchers with specific description and evaluation of an intervention program from an ecological perspective in a professional football (soccer) club in Denmark. The aim of the program was to reinforce the culture of psychosocial development in the daily practice of a professional football academy, provide the skills required to succeed at the professional level and create stronger relationships between the youth and professional departments. The authors suggest six principles as fundamental governing principles to inform an intervention inspired by an ecological perspective. Descriptions of the intervention program are presented in three interconnected steps followed by evaluation of the success of the program. Insights are provided into delivery of workshops, the supervision of the coach, on-pitch training, evaluation of the program and integrating sport psychology as a part of the culture within the club.

Keywords: soccer, athletic talent development environment, career transition, elite sport, talent development, consulting.

Preparing footballers for the next step: An intervention program from an ecological perspective

About 265 million people regularly play football (i.e., soccer) and football is considered to be one of the most popular sports in the world (Haugaasen & Jordet, 2012). The major professional clubs around the world spend increasing amounts of money on salaries for world-class players and nowadays professional football, including talent development in youth football, is increasingly characterized by big business, high politics, and professionalization (Persson, 2011; Roderick, 2006). According to the Finnish sports sociologist Kalevi Heinilä, the professionalization of sport is the result of the totalization of sport (Heinilä, 1982), which is the fact that success in international competition is a matter of a well-functioning national sport system including coaching expertise, training facilities, and scientific research (Vettenniemi, 2010). In this process of professionalization and totalization, sport psychological intervention becomes an important factor as a way to optimize the performance of a team or an athlete. Danish football is also part of the increased professionalization and totalization of sports (Persson, 2011), but the majority of Danish football clubs are not able to buy enough foreign professional players for their first team. Therefore, Danish clubs put their faith and efforts in talent development and the predominant aim of youth development programs is to develop players for the first team. Therefore the clubs depend on the possibility of making a profit with sales to other clubs in an international market, and in this way young players and their successful transition to the senior professional level are a necessary resource for the professional department and the economy of the club. In this article we will present sport psychology practitioners and applied researchers with details of an intervention program in a Danish professional football club, which is inspired by the ecological perspectives emerging in recent sport psychology literature. The intervention aims to facilitate the players' transition from talented youth level to the professional level and evaluate the success of the intervention program.

The transition from talented youth level to professional level is considered to be the

most difficult and complex transition in sports (Stambulova, 2009). Accordingly, research illuminates that the path to the professional ranks is growing harder each day and expectations and demands are high. As an example, it has been demonstrated that of 265 million footballers across the world only 0.04% play in a professional league, suggesting that football is highly competitive and reaching expertise is difficult (Haugaasen & Jordet, 2012). Another example from English football displays a more depressing image of the transition from youth to professional football, namely "that of 10,000 boys who play in England's football factories (academies) each season – fewer than one percent of the boys are likely to make it as professional footballers" (Green, 2009, p. 7). Together these examples illustrate the difficulties for talented youth footballers to make it as a professional footballer.

Resources associated with successful career transitions

Literature about career transitions highlights that transitions in the sport domain co-occur with transitions in other domains (Wylleman, Alfermann, & Lavallee, 2004), and that a match between an athlete's resources and the demands of a transition will allow an athlete to enjoy a successful transition whereas a mismatch is likely to result in a crisis transition (Alfermann & Stambulova, 2007; Stambulova, 2009). Such resources are internal as well as external factors.

A key internal factor is the player's psychological skills, which allow athletes to cope with the demands of transition (Alfermann & Stambulova, 2007; Stambulova, 2009). Holt and colleagues' study of young talented football players on the verge of making a breakthrough into professional ranks (Holt & Dunn, 2004) and on the verge of *not* making it into the professional ranks (Holt & Mitchell, 2006) revealed that psychosocial competencies are associated with successful athletic career transitions in football. Together, these studies show that a specific set of psychological characteristics are associated with making a successful transition into elite football, a set of skills that does not correspond with the skills needed to succeed at the elite level. Moreover, MacNamara and colleagues (2010a; 2010b) suggest that the delivery of sport psychology services

to young athletes should acknowledge that the skills needed to reach the elite level are different from the skills needed to succeed at the elite level and they introduce a distinction between psychological characteristics of excellence (PCE) and psychological characteristics of developing excellence (PCDE). These ideas have prompted a turn towards increasingly regarding young athletes as a group that needs tailored interventions and programs, including specific skills, strategies and considerations that meet the particular needs of the group (Holland, Woodcock, Cumming & Duda, 2010). Furthermore, it is acknowledged that psychosocial development (i.e., the development of psychosocial skills, characteristics or assets) should be part of any youth sport program, and Harwood (2008) argues that "by developing an early emphasis upon psychological competencies in football, one may enhance the young player alongside equipping the young person with internal assets transferable to other life domains" (p. 111). In sum, developing "a holistic skills package" is important for long-term development and successful transition to elite sport (Martindale & Mortimer, 2011).

External resources refer to the support provided by an athlete's immediate (family, peers, coaches, teammates) as well as more distant (sport federation, educational programs) environment.

Intervention programs from an ecological perspective

The holistic ecological approach to talent development in sport (Henriksen, Stambulova & Roessler, 2010) shifts the focus from the individual athlete to the whole athletic talent development environment (ATDE). This approach builds on a burgeoning interest in ecological perspectives in talent development that stress the role of interaction between the athlete and his/her context (García Bengoechea, 2002; Krebs, 2009).

According to the modern scientist practitioner model (Lane & Corrie, 2006), the practitioner can be seen as a researcher who relies on theory as he or she makes an assessment of a problem and decides on a strategy to solve it. In this sense, the theories a practitioner brings to an

intervention shape his or her assessments, reflections and intervention strategy. We suggest that a practitioner who works from the holistic ecological approach including its working models and case studies of successful environments (Henriksen, Stambulova & Roessler, 2010a; 2010b; 2011) will be guided by the following six fundamental principles in his or her work. First, the practitioner should acknowledge that the athlete is embedded in an environment. This fact should not be disregarded in the service delivery, but inspire the practitioners to conduct their interventions inside the athletes' environment rather than remove the athletes from their natural setting and into the practitioner's office, because learning is often bound to the context in which it is learned (Barab & Plucker, 2002). This first point also suggests that practitioners should aim to involve the athletes' environment (coaches, managers, teammates etc.) in the intervention in order to facilitate support for the athletes during the intervention. Second, the intervention should be built on a thorough assessment of the environment from a holistic ecological perspective, thus looking into strengths and weaknesses in the organizational culture and the micro and macro environment in and out of the sporting domain. Third, the practitioner should not only work with the individual athletes but aim to optimize the entire environment around the athlete or team. Research suggests that environments are most successful in supporting athletes when the efforts of different parts of the environment (school, club coaches, national team coaches, parents and others) are integrated rather than fragmented or in opposition. Therefore the practitioner should be focused on creating a good dialogue among the environment's different agents. This also involves proximal role models, the integration of elite-level athletes in the talented athletes' development, and giving priority to training groups with supportive relationships rather than individualized training. Fourth, an environment is always situated in a larger cultural setting of, for example, a national culture and a sport-specific culture. A practitioner should take this cultural setting into consideration and plan the intervention accordingly. Fifth, the intervention should aim to create and maintain a strong and coherent organizational culture. Research from the holistic ecological approach suggests that an

organizational culture in which espoused and enacted values correspond provides stability and clarity for the group and allows people to focus on the task. Sixth and finally, it is suggested that successful environments see the athletes as whole human beings and support the development of a holistic package of psychosocial skills that will be of use for the athletes not only in their sport but indeed in their other life spheres as well (Martindale & Mortimer, 2011).

These principles inform the intervention from the initial assessment and the formulation of targets to the delivery and evaluation. In line with these principles and based on a thorough analysis of the club as a talent development environment, we designed a sport psychology program aimed at supporting within-career transitions at a Danish professional football club and targeting not only the athletes but also the environment itself.

The aim of the present paper is to a) provide sport psychology practitioners and applied researchers with a detailed description of an intervention program that was guided by the principles derived from the holistic ecological approach and b) evaluate the participants' experiences of the intervention program.

Method

The method section describes how we conducted the evaluation of the intervention program. The program itself is described in details later in the paper. The intervention program was evaluated in two steps: 1) through a focus group interview at the end of the program with eight under-17 players (age 15-16) and one under-17 coach (age 33); and 2) through ongoing participant observations and informal talks with relevant persons in the club (manager of sports, youth director, and professional coach) throughout the program and documented in a logbook.

A focus group interview is characterized as a conversation in which the participants share experiences rather than talking directly to the interviewer (Brinkmann & Tanggard, 2010). In the present study, the overall focus of the interview was the participants' own understandings and experiences of the intervention program. The interview was conducted as a semi-structured

interview (Kvale & Brinkmann, 2009) where the interviewer had pre-selected a number of topics derived from the themes of the intervention program, but which also allowed the athletes to talk about topics they found to be of importance. The interview guide started out with broad and open-ended questions such as: “What are your experiences of the intervention program?” “What have you learned in the intervention program?” and “What has been the best part of the intervention program?” These questions were followed by more specific but still open-ended questions to prompt elaboration, such as “In which way did the tales from professional players provide you with new perspectives on your career?” and “How did you notice the effect of our work on goal setting skills in training and matches?” The participants of the focus group interview were eight under-17 players and one under-17 coach from AGF football club. The interview lasted one hour and 45 minutes with a purpose of uncovering deeper understanding of the participants' experience of the intervention.

Ongoing participant observation as a “moderate participant” (Spradley 1980) became an important part of the evaluation, as the principal author was continually engaged in looking for effects of the program. These observations included a continuous dialogue between the principal author and the manager of sports, youth director, and professional coach during which we discussed their experience and evaluation of the program. The participants furthermore commented on the value of the program and helped identify additional developmental areas for future programs in the club. The observations and informal talks were noted in a logbook the same day. This second step aimed at achieving contextual sensitivity and was used because it enables *in situ observations* of the social practices under study (Tanggaard, 2006).

Data analysis, treatment and trustworthiness

The analysis of focus group data includes group interactions (Brinkmann & Tanggard, 2010; Warr, 2005), because group interactions influence the content of what is discussed (Puchta & Potter, 2005). The analysis of data were conducted in three interrelated steps: 1) deductive

development of codes from the themes in the intervention program (e.g., supervision of the coach), 2) formation of themes from the codes and 3) the organization of themes into larger units of abstraction to make sense to the data (Creswell, 2012). The trustworthiness of the study is established during an ongoing investigator triangulation (Denzin, 1978) in which the authors reassessed the coding and categorizing of each data unit until agreement was reached, which established peer validity (Kvale & Brinkmann, 2009) and enhanced the accuracy of our interpretations.

Description of the club

AGF football club is one of the most successful Danish football clubs with five Danish championships and nine cup titles (a record). The club consists of two departments: a volunteer, non-elite department for a wide range of football players, and a professional elite department for male youth teams (ranging from under-13 to under-19) and the professional elite senior teams. The club has full-time coaches for each youth team. The professional senior team is organized into a section of its own and plays in the Danish Premier League. The club is a successful talent development environment and produced between 15 and 25 male youth national players from 2007 to 2009, and seven of the 25 professional players at the club are products of the youth department.

Description of the intervention program

The primary purpose of the present paper is to provide sport psychology practitioners and applied researcher with a detailed example of an intervention program that was guided by the principles derived from the holistic ecological approach. The overall structure of the program and evaluation is outlined in Table 1. Sharing details of specific programs is an important avenue for professional stimulation and development.

(Please insert table 1 around here)

Step one: Assessment

First, we established contact with Elite Sports Academy Aarhus and AGF football club in order to start the program. We gained preliminary acceptance through the manager of sports and coaches for creating a program for the club, and later we gained written acceptance from the players. We agreed that the program would have both research and applied purposes and that for the research purposes, extra time would be devoted to assessment and to data collection throughout the process. We agreed that the identity of the club would be known whereas the identities of specific persons involved in the study would remain anonymous. The principal author, who delivered the program, is a sport psychology researcher and trained sport psychology practitioner with seven years of experience in working with youth and professional athletes in football and other sports.

The assessment consisted of a thorough analysis of the strengths and weaknesses at AGF football club. Specifically, we collected and analyzed data over seven months in 2010 and 2011. This investigation was a case study based on the holistic ecological approach, and focused on 1) describing the environment's components and their relationships; 2) mapping the organizational culture of the club; and 3) investigating the psychosocial skills that the players developed through being a part of the particular environment. Overall, the environment was successful and the results have been presented in depth elsewhere (see Larsen et al., 2012; 2013). In the present context we would like to emphasize how the few problematic characteristics of the environment served as a basis for the intervention to come. First, and in terms of the relationships in the environment, it became clear that the youth department suffered from a lack of proximal role models in the daily training. The professional players were visible in the environment, however there was no interaction between the professional and youth players. This subsequently led to another problematic characteristic, namely that communication between the coaches and players about challenges, expectations and potential pitfalls in the transition from youth to professional level was non-existent at the club. Second, the investigation highlighted that the club had no culture for sport psychology. While the organizational culture was strong and the club developed solid technical, tactical and

physical skills, the club did not recognize or even appreciate its important role in developing the players' psychological characteristics. Third, and closely linked to the culture, the initial assessment showed that important psychosocial skills such as managing performance and process outcomes (e.g., coping with adversity) and setting own goals were not taught as a natural part of the training, although they were often emphasized as very important for the within-career transition to the professional level.

Step two: Feedback and objectives

After finishing the initial investigation of the club as a talent development environment, we arranged a meeting with manager of sports, youth director, youth coaches, during which we presented the findings. In hindsight, this meeting itself became an important part of the intervention at the club. The meeting led to several new initiatives on the part of the environment, designed to improve their practice, and the participants commented on the value of feedback from an outsider to help identify 'blind spots' and optimize the environment.

During the meeting and based on the feedback we agreed on the following objectives of the intervention: (a) to create stronger relationships between the youth and the professional departments in terms of developing cooperative efforts that would strengthen role modeling and communication between the coaches and players in the two departments; (b) to develop the organizational culture to include a focus on integrating psychosocial development as a basic value and as a natural part of daily practice.

Step three: Program delivery

The intervention program took place at AGF football club and consisted of three distinct but interrelated efforts: (1) a series of workshops spread out over four months targeting the under-17 players but also inviting players from the professional department and coaches and focusing on developing a range of specified psychosocial skills; (2) an ongoing supervision of the main coach with the purpose of helping him support the program and stimulate psychosocial

development between workshops; and (3) a number of psychological training sessions on the football pitch designed to facilitate the transfer from workshop discussions to actual on-pitch performance.

Workshops. The workshop series progressed in logical order (e.g., from basic knowledge about goal setting to practicing goal setting on the pitch) and each 90-minute workshop followed a similar protocol, however varying in content. Each workshop had a theme, and the content was discussed and adjusted in collaboration with the under-17 coach prior to each workshop (see Table 2). After each workshop that took place off the pitch (e.g., in a meeting room), the topics were practiced on the pitch to create a 'bridge' between theory and praxis. Taking goal setting as an example, the players initially received information about the theory of goal setting (off the pitch). Second, the under-17 players would share experiences about goal setting in groups and a player from the professional department visited the workshop to share his thoughts and experiences about goal setting. Third, the under-17 players designed personal goals for a specified period and received feedback regarding their goals from the principal author (are the goals specific, process-oriented and measurable?) and from the coach (are the goals relevant and realistic?). Fourth, the goals were applied to the pitch where the under-17 players would work with targeted skills in practice. Fifth and finally, the experiences with goal setting on and off the pitch would be evaluated and each player would reflect upon how to work with specific personal goals for the next workshop.

The workshop series was designed to create coherence from one workshop to another. Therefore each new workshop contained a short reflection regarding the theme of the previous workshop. In order to stimulate the players to reflect upon challenges and issues in a new way we focused on putting the players in new situations to provide opportunities for them to: a) understand themselves and their learning processes; b) be aware of their own kind of reasoning, c) integrate and reflect on previous learning experiences; d) challenge established behavioral patterns and meaning perspectives in their problem-solving efforts; and e) look for new ways to reorient their problem-

solving behavior in a more effective way (Jonker, Elferink-Gemser, de Roos & Visscher, 2012). To provide a multitude of perspectives on the topics in the workshops we invited players and a coach from the professional department to join the workshop. We based the selection of the coach and each professional player on his relevance to the specific workshop and content. As an example, in workshop two that was about the transition from junior to senior, we invited a young newly professional player who currently combined professional football and university studies. He described his experiences of coping with the transition to professional level and provided relevant information and clarified his experiences of transition demands and forthcoming within-career transitions relevant for the under-17 players. In order to share these experiences, the workshops were dictated by a personal disclosure mutual-sharing approach, as the purpose was to make the under-17 players reflect and listen to tales and stories from the professional players, coach and each other (Windsor, Baker, & McCarthy, 2011).

(Please insert table 2 around here)

A key element of the program was to implement sport psychology as a part of the organizational culture of the club. The ecological perspective further dictated that the participants as well as the surrounding microenvironment needed to know about sport psychology and how it is employed at the club. Therefore we spent a lot of time 'lobbying' for the program and making sure the managers, coaches from other teams and the health department were supportive of the program. Another key part of the program was to make the youth players understand that adversity and struggling to make a transition from youth to senior level is inevitable and something every player experiences. As an example of working with adversity we arranged a match against the under-19 team. The under-17 team played against a team that was physically stronger, faster, more experienced and in that sense putting more pressure on the under-17 players than they were used to. Before, during (five minute breaks in each half and at halftime) and after the match we asked the under-17 players to reflect upon their experiences in order to gain knowledge of their own personal

ways of handling adversity as well as how the team reacted to adversity. Besides reflecting upon adversity in the game, the senior professional players attending the workshops generally described the transition as a giant leap that included a marked increase in physical as well as psychological demands. As an example of the psychological pressure, one of the professional players described a period in which he played left back (not his usual position) and neither he nor the team was performing well. People outside the club gave him a hard time and booed, which affected his performance. He described how he went through a process of changing his mindset from being affected by the criticism to focusing on the task at hand and showing that he could perform well, and that it did not matter whether he played in front of 100 or 10,000 spectators. When the coach of the professional team visited a workshop, he emphasized how the demands would increase during the transition from youth to professional football.

These perspectives, along with those of the principal author and coach, inspired the under-17 players to see the importance for their upcoming transitions of: developing a winning mindset; learning to cope with injuries, adversity and pressure; developing self-belief; and generally paying more attention to their psychosocial development. They learned that they needed to be prepared for the new demands and expectations at the elite level in order to increase the likelihood of a successful transition to the professional level.

Findings: Evaluation of the program

In general, coaches, managers and players considered the program to be a success. Coaches highlighted more autonomous and reflective players; more quality in training due to increased awareness of goals; and better communication between youth and professional players as important outcomes of the intervention. More specifically, our analysis of the observation notes and focus group interview regarding the evaluation of the program revealed three particular reasons for this success. These are areas of particular importance to consider while delivering intervention programs from an ecological perspective: 1) Stimulating relationships inside an environment are

time consuming but significant; 2) the importance of the coach's acceptance and support in the process; 3) the importance of taking sport psychology to the pitch (and not isolating it in a consultation office) and 4) professional players' narratives stimulate reflection and learning among younger players.

Stimulating relationships inside an environment are time consuming but significant

The participants emphasized that much is to be gained from the group workshops. The workshops in which under-17 players listened to professional players' experiences created room for reflection and helped the young players build the capacity to overcome the many obstacles encountered during their sporting career. One of the findings of the program was that delivering sport psychology from an ecological perspective, particularly creating stronger relationships between different persons in the microenvironment, required much time. In particular, the principal author and under-17 coach spent a lot of time planning, preparing for and evaluating training, as the coach was the key person at the club and in the program. One of our experiences was that creating close relationships between the principal author, under-17 coach and professional department was a time-consuming task because the coach had to be committed to the program from the beginning for it to be successful.

The importance of the coach's acceptance and support in the process

Delivering sport psychology from an ecological approach highlights the benefits of involving the environment. In this specific case, the under-17 coach in particular became an important partner, and after the workshops the under-17 coach acknowledged that he was pivotal for long-term program success. The coach attended every workshop, which created a strong connection and transfer from the meetings in the clubhouse to the actual training on the pitch. The principal author and the coach discussed each workshop and designed football specific drills and exercises to support the themes in the workshops. Most importantly, however, we discussed how the coach could integrate the topics from the workshops in the on-pitch training. The close

involvement of the coach also meant he became a positive advocate for the program and he integrated the perspectives of the program into his work.

Along the way this cooperation between the principal author and the coach turned into coach supervision. The coach was curious to learn and eager to keep the program running between the workshops on the days when the principal author was not present. On average there were three weeks between each workshop. In this period the coach handled the daily training sessions (as always) and in addition he made sure that players worked with the topics (i.e., focusing on drills related to goal setting and talking to the players about goal setting) from the workshops on the pitch. Therefore the success of the program was highly dependent on the ability of the coach to work independently of the principal author, and to work with the topics of the program in the daily training sessions. This also points to the fact that the coach needs to be highly motivated and autonomous, thus underscoring coach education that involves developing the core individual beyond their coach persona. The under-17 coach and principal author had daily contact during the program. The main topic of these daily supervisions was how the coach could integrate the topics from the workshops into daily training. This work laid a foundation for cohesion of themes (from meeting room to the pitch) through the workshops. In this way, the program was practiced and integrated as a natural part of everyday training at the club.

The importance of taking sport psychology to the pitch

Alongside the workshops the aim was to facilitate transfer from workshop discussions to actual on-pitch performance. An additional, perhaps not unexpected, finding was that transferring skills and reflections from the meeting room (theory) to the pitch (praxis) was challenging for the players. This was particularly evident when we worked with goal setting. Overall, there was a great deal happening in the players' lives (e.g., handling dual careers), which had an impact on the quality of the processes early in the program. During the workshops that took place in the morning, each under-17 player set specific goals for himself, and these goals were meant to be applied in the

afternoon training session. However, long days in school with a high information load affected the players' memory and attention span and often they forgot their personal goals. Therefore we started each training session (in the afternoon) by creating an opportunity for the players to remind themselves of their personal goals and how they should be practiced during training. One of the professional players who was a former international player came to a training session to give the under-17 players advice on working with personal goals. Looking back at the program, he described how he was able to create more quality in goal setting and how to keep goals in his mind by making them visual (e.g., writing them down on paper):

> I made a small card the size of a credit card with different goals. When I was at the hotel before a game I was able to take the card out and go through the goals to prepare for the game at hand. For example, to get the right attitude, whether I had completed the things I needed to do during the week or not; to visualize games when I did well and what I did during those games. At the beginning I was forcing myself to think along those lines, now it comes naturally. It is also a way not to be nervous because you are forced to think about other things than the game at hand (professional player).

On the pitch we found that the complexity of goals should match the complexity of the setting in which the goals are to be implemented. Some athletes experienced difficulties in working with specific and isolated goals in a complex game. We therefore focused on bridging the gap between the theory and the art of setting goals. For this reason, goal setting became a recurring theme through all the workshops and we designed special drills to integrate the goals on the pitch. This resulted in less confusion for the players, fewer mistakes, more concentration, and clear communication and focus throughout the training, which is visible on the pitch. We initiated training by working with isolated goals such as speed, first touch and turns in isolated drills, moving to more complex drills and games reflecting game situations. It became clear that complex exercises required goals that matched this complexity such as maintaining concentration throughout the exercise; exaggerating movements to be playable for teammates; or active orientation.

On several occasions, coaches noted that clarity about goals produced enhanced quality in the

specific drills, as was apparent in the following observation note:

> One afternoon after the players had formulated goals and completed specific drills to match these, I talked to the assistant coach. He seemed in a good mood, smiled and was somewhat surprised. He described that from his perspective he experienced as much as 40% more quality in the players' passes than in the previous week. He specifically noticed an increase in focus (observation material).

Additionally, one player told the assistant coach that he now understood the exercises better and was better able to concentrate on that which was important.

Professional players' narratives stimulate reflection and learning among younger players

When asked about the successful elements of the program, the under-17 players highlighted that the newly developed connection with the professional department was crucial for learning how to cope with the demands of transition. Receiving information about the same issue from several multiple sources was highlighted as important for the players' learning. One youth player talked straightforwardly about the importance of integrating the professional players into the program:

> We know that you [principal author and coach] know a whole lot, but I feel that we have more in common with them [the professional players], and I feel that I can use what they talk about, because it is something that has happened and they have experienced. Getting to know how a professional player actually managed his career and transitions and what he went through to get to the top at AGF was very good (under-17 player).

Another player saw value in the perspectives of the principal author and coach, but emphasized that they mainly contributed with relevant theory and basic knowledge. Together, receiving information from three different perspectives created a very solid learning foundation, as described by another youth player:

> I think it is two different perspectives. I would not say that one is better than the other. The goal setting that we are talking about [from the principal author] is something I can use here and now. Listening to

> the professional players may be something that I can use in the future if I make it that far (under-17 player).

Alongside the importance of role models, working with psychosocial skills over a period of months had an impact on the under-17 players, as one player explained about goal setting: "I learned how to set up an effective goal and how to reach that goal. I write in my logbook what I should and should not do." Another player additionally described what is important to reach personal goals in his career:

> I have realized that it is very important to constantly set new small goals, have a structured life, do my homework, and work on the goals in each training session to get the most out of it. I have thought about how he [former national and now professional player] wrote down his goals and now I write down what I need to practice and evaluate the effects of it (under-17 player).

Also, the under-17 coach noticed that the increased focus on goal setting strengthened the players' motivation as the players start to focus on something they can control. The coach emphasized that providing the players with a sense of control of their own development is important because they create their own goals rather than try to reach goals others have set for them. After the program he said that the under-17 players are now more aware of goal setting; that it is their responsibility to set goals and that it is a learning process because they are used to a coach that tells them what they need to do. In addition to goal setting, the under-17 players described that the stories of the professional players contributed to reflection upon how to handle adversity on the pitch, as one of the players related:

> I think that it has helped us a lot, because now we are conscious of what we should do when we [ed. in the games] are in adversity or have momentum, it is one of the reasons we are doing so well this year, that we are good to back each other up, we are better at thinking about what we should do (under-17 player).

Another player added: "We know what we should do on the pitch, we have the solutions and we just have to communicate it" (under-17 player). They described that a key part was to stick to the agreements and to have a good plan. This provided security and the faith that everybody was doing

their job, and you can focus on the task at hand instead of worrying whether the player next to you is focusing on his.

All in all, the evaluation demonstrated that the program created a room for reflection for the under-17 players and a general awareness of demands and development of psychosocial skills for coping with future within-career transition at AGF football club. During the program we handed each player a personal logbook for reflections during the program. Reading these logbooks told us that each player individually had become more aware of demands and had developed a deeper understanding of the different elements in and their importance for the transition to the professional level.

Discussion

The present paper has provided a detailed description of a within-career assistance program based on a number of principles derived from the holistic ecological approach (Henriksen et al., 2010). The program consisted of three steps and an evaluation. The first step was a thorough assessment of the environment based on an ecological perspective and particularly sensitive to the relationships in the environment and to how the environment worked to support the players' development and the psychosocial skills needed in the transition to the professional level. This investigation pointed to several strengths and two main weaknesses: a missing link between the youth and the professional players resulting in a lack of role models, and a lack of focus on the development of psychosocial skills. The second step was a feedback to the environment. This feedback became in itself an intervention and became a basis for the intervention program. The third step was an intervention program that consisted of three elements: coach supervision, a workshop series introducing and training psychosocial skills, and a number of on-pitch training sessions designed to reinforce the use of these skills in the daily training and matches. The final part of the intervention program was an evaluation.

Several factors allow us to deem the program to be a success. The objectives of the

program were to strengthen relationships between youth and professional players and to develop a culture for integrating psychosocial development in the overall development of the players. These objectives were both accomplished and the manager of sports and the youth director were in general satisfied with the in-depth perspectives of how to integrate sport psychology as part of the club culture. Additionally, the program resulted in a stronger sense of clarity among the players regarding the demands and expectations involved in the transition to the professional level, enhanced understanding of how to handle adversity, and enhanced quality in training as a result of an increased ability to set goals.

Intervention programs from an ecological perspective

The holistic ecological approach opens new avenues and inspires coaches and practitioners not only to work with the individual players' athletic development, but to be sensitive to, analyze and work to create an environment that is supportive of the athletes' development. In the introduction we suggested six principles as fundamental governing principles to inform an intervention inspired by the holistic ecological perspective, of which five were particularly relevant in the present study. First, the practitioner should acknowledge that the athlete is embedded in an environment. In the present intervention, this principle was expressed through long-term assessment and working inside the environment, informing and including people from the environment in the different steps of the program. Second, the intervention should be built on a thorough assessment of the environment from a holistic perspective and in the present study we assessed the strengths and weaknesses at the club. This assessment focused not on the individual players but rather on the values and assumptions in the environment. Third, the practitioner should not only work with the individual athletes but also aim to optimize the entire environment around the athlete or team. In the present study, it was a specific aim of the intervention program to strengthen the relationships and dialogue between the different parts of the environment: between the youth and the professional players and the principal author and coach. During a recent meeting with the under-17 coach, he

informed us that even today (one year after the intervention) it is clearly visible that the program tied together different layers at the club: vertically (between peers) and horizontally (under-17 and under-19 players and coach and the professional department). Additionally, and as a product of the program, the club has hired a former professional player of the club to act as a role model (on and off the pitch) for the under-19 team, and in that sense proximal role models are today a natural part of daily life at the club. The importance of role models has previously been demonstrated by Henriksen and colleagues (2010a; 2010b; 2011). Fourth and fifth, the intervention should aim to create and maintain a strong and coherent organizational culture and treat the athletes as whole human beings by supporting their development of a holistic package of psychosocial skills that will be of use for the athletes not only in their sport but indeed in their other life spheres as well (Martindale & Mortimer, 2011). In the present study, these two principles were interrelated.

The first step of the intervention (assessment) revealed that the club in many ways already had a strong organizational culture in which the espoused values corresponded with enacted values. The club and players displayed a strong family feeling and the club provided a holistic focus on talent development. However, this culture also included a lack of attention given to the development of psychosocial skills. In many ways, coaches were not aware of this issue and no priority was given to psychological training. This fact corresponds to a trend in international football where sport psychology support services are viewed upon with skepticism, due to a lack of knowledge and unwillingness to integrate the practitioner into the team (Johnson, Andersson, & Fallby, 2011). Therefore it became an explicit aim of the intervention not only to develop the psychosocial skills of the players, but indeed to create a culture for treating such development as a natural part of everyday training. The holistic ecological perspective helped us to develop such a culture and to meet the challenges inherent in providing sport psychology in football. We base this conclusion on the following characteristics of the program: 1) the program integrated several agents in the environment; 2) it build on a thorough assessment and feedback that was recognized by the

coaches; 3) it took the psychosocial development on to the pitch; 4) it involved coach supervision; and 5) it was a long-term program in contrast to short-term perspectives that seems to characterize sport psychology services in professional football (Johnson et al., 2011). These program characteristics helped us transcend the inherent problems (e.g., skepticism, lack of knowledge) associated with delivering sport psychology in professional football (Johnson et al., 2011; Nesti, 2010).

It is worth to note, however, that the holistic ecological approach with its focus on the totality of an athlete's environment implies an all-encompassing approach to the environment. The present intervention neither included the non-sport domain (e.g., relationships and dialogue between club, family and school) nor the macro level (federation, media and more). We therefore argue that the present case is an example of an intervention that is ecological but not holistic.

Career assistance programs

The findings from this study provide perspectives on how to deliver career assistance programs in elite sport. The transition from talented youth level to professional level is difficult and complex involving several domains of development (Wylleman, De Knop, & Reints, 2011; Wylleman, et. al, 2004), and a key factor for successful interventions is the player's resources (experiences and psychological skills) (Alfermann & Stambulova, 2007; Stambulova, 2009). Therefore most career assistance programs aim to build such resources in the athletes. However, most programs are also based on the general idea of a practitioner (sport psychologist or other) teaching the athletes skills and preparing them for the adversity to come (see Petitpas & Champagne, 2007). The present study demonstrates that a career assistance program could involve the athletes' environment to their advantage. The youth players emphasized their positive experiences of exchanging knowledge with the professional players and coach. The practitioner delivering career assistance programs could be aware of integrating several informants (e.g., former athletes, current elite-level athletes, elite-level coaches). Wylleman & Reints (2010) illustrated the

relevance of athletes' environment in career assistance programs and how teaching psychosocial skills can be part of athletes' development throughout their talent development. Following these perspectives, the multiple-information approach for teaching psychosocial skills in this study, serves as a strong foundation for clarifying career transition demands for youth athletes. Such knowledge lends some new perspectives to career assistance programs and the content of these programs. Practitioners need to provide several sources of information (different roles at the club or in the program) to teach about future within-career demands and expectations and therein make the individual athlete reflect upon his or her strategies, support, self and the situation, which is crucial for successfully coping with transitions (Alfermann & Stambulova, 2007).

Limitations of the program

The current intervention was first and foremost an intervention, and research was a secondary purpose. The intervention was not undertaken as in integrated part of a rigorous research project designed to produce solid findings in the form of an evaluation of an intervention program. Rather it was conducted as a "real life" intervention designed to help an environment improve their practice. The program was designed to not allow for precise measurement, to not involve a control group and to be dynamic and adjustable to the needs of the group. The ecological perspective therefore, involving several persons in the program, makes it is difficult to measure success as these persons as intended co-affected the development of sport psychology in the club. In that sense, the ecological perspective is an asset when delivering sport psychology that becomes part of the club culture but a weakness when measuring for effects. Another limitation of the study was the dual role (researcher and practitioner) held by the principal author. This dual role raises the question of whether simultaneously working and researching inside an environment is feasible. The present program did not integrate the non-sporting domain in this study, therefore future programs could use more integrative efforts and supplement this study by using a holistic perspective in the environment (in addition to the ecological approach) and integrate family, school, younger and

older athletes and therefore work in the sporting as well as the non-sporting domain to create stronger connections throughout the microenvironment.

After the program

After we ended the ecological program, AGF football club initiated an even fuller version of the program: one that targeted all the club's teams and was not limited in time but seen as an on-going project. However, after a successful period the program was terminated due to a lack of financing, which underscores that although we came a long way, sport psychology and career assistance are still not a top priority in football.

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1 Table 1

2 *Program protocol*

Description of the intervention program	
Step	Objective
1. Assessment	Preliminary meeting with Elite Sport Academy Aarhus and relevant persons from AGF football club. Analyzing strength and weaknesses in the environment and the culture for development of psychosocial skills.
2. Feedback and objectives	Evaluation of step one with relevant persons at AGF football club. Determining objectives for intervention.
3. Program delivery	Delivering three distinct but interrelated efforts: (1) a series of workshops targeting the under-17 players but also inviting players from the professional department and coaches and focusing on developing a range of specified psychosocial skills; (2) an ongoing supervision of the main coach with the purpose of helping him support the program and stimulate psychosocial development between workshops; and (3) a number of psychological training sessions on the football pitch designed to facilitate transfer from workshop discussions to actual on-pitch performance.
Evaluation	
Evaluation of the intervention program	Focus group interviews with under-17 players and coach. Informal talks and dialogue with relevant persons at AGF football club and evaluating the program. Targeting new

areas of development at the club and for other age groups.

Table 2

Workshop delivery and content

Workshop theme	Purpose and structure of the workshop	Literature and principles	Participants
1. Purpose and content of the intervention, introduction to sport psychology, ecological approach and sports career	Create a foundation for the workshops. Introduce sport psychology therein highlighting psychosocial skills, the career and transitions, goal setting and reflection	Danish sport psychology services, Henriksen, Hansen & Diment (2011) Career models, Alfermann and Stambulova (2007) Stambulova (2009) Psychosocial skills, Larsen et al. (2012), Harwood (2008)	Off and on the pitch: first author, under-17 players and coach
2. The transition from junior to senior – challenges, adversity and preparation for professional football	Evaluation and status regarding previous workshop. Outsider witness session with a young professional player from the club. Group session and discussion	Psychosocial skills, Larsen et al. (2012), Harwood (2008) Career models, Alfermann and Stambulova (2007) Stambulova (2009)	Off the pitch: first author, under-17 players and coach. A young professional football player combining professional football and studying at the university. He described his career at the club. Challenges, combining school and football, being a professional. On the pitch: under-17 players and coach, first author, under-19 team and coach (on the pitch)
3. Using goal setting and other psychological skills on and off the pitch	Evaluation and status regarding previous workshops. Outsider witness session with experienced player. Group session and discussion. Presenting goal-setting theory, working with goal-setting models (what and why), setting own short goals and creating action plans (what and how). Under-17 coach manages the process until next workshop	Goal-setting theory, Locke and Latham (1990). Psychosocial skills, Larsen et al. (2012), Harwood (2008)	Off the pitch: first author, under-17 players and coach. A former European international player with over 100 national games described how he used goal setting and sport psychology through his career. On the pitch: under-17 coach and players.
4. The art of goal setting – applying it to the pitch	Evaluation and status regarding previous workshops. The players present goal-setting plans for each other. Reflection on challenges and barriers for reaching goals and how to seek support. Creating awareness of how to	Goal-setting theory, Locke and Latham (1990) Psychosocial skills, Larsen et al. (2012), Harwood (2008)	Off and on the pitch: first author, under-17 players and coach

	apply to training sessions		
5. Transitions and coping with adversity on and off the pitch	Evaluation and status regarding previous workshops. Outsider witness session with experienced player. Group session and discussion. Discussion and status of setting own goals and application to training sessions. What is working and what needs to be improved?	Psychosocial skills, Larsen et al. (2012), Harwood (2008), MacNamara (2010a; 2010b) Transitions and coping strategies, Alfermann and Stambulova (2007), Stambulova (2009)	Off the pitch: first author, under-17 players and coach. A young foreign player who has experienced serious knee injuries describing how he handled adversity and what could be learned from the experience. On the pitch: under-17 coach and players
6. The professional perspective – reflections from the first-team coach	Evaluation and status regarding previous workshops. Presentation from first-team coach. Group session and discussion. Discussion and status of setting own goals and application to training sessions. What is working and what needs to be improved?	Psychosocial skills, Larsen et al. (2012), Harwood (2008), MacNamara (2010a; 2010b)	Off the pitch: first author, under-17 players and coach. The first-team coach described the challenges, demands and expectations to go from youth to professional. On the pitch: under-17 coach and players